

# Municipal Journal

## And Engineer

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NEW CITY HALL, LITTLE ROCK, ARK.

### LITTLE ROCK'S PUBLIC IMPROVEMENTS

Hampered by Limited Power to Issue Bonds—More than  
Thirty Sewer Districts—Successful Municipal  
Electric Light Plant

EDITORIAL CORRESPONDENCE

Like the other cities of the State, Little Rock is greatly hampered and handicapped by the limited powers granted to cities by the State Legislature. It cannot issue bonds for any purpose as a city, but improvements must be made under the charter provisions for Improvement Districts. Under this, any ten people may petition to improve a given district. Within three months of the presentation of the first petition, a second petition for the same improvement, having the signatures of the owners of the majority of the assessed valuation of the property, must be presented to Council, which then appoints three Commissioners from the district with full power to carry out the improvement. They select the engineer, supervise the work and issue the necessary bonds, which stand against the improved property as a lien. Bonds can be issued to an amount equaling 20 per cent. of the assessed valuation of the property. This procedure is necessary whether the paving of a street or the building of a city hall is in question.

In consequence of this law, Little Rock's improvements have been made in patches and no systematic, comprehensive scheme has been followed out. There are about 35 separate sewer districts, some of the newer ones being allowed to empty into the older. As a result some sewers are inadequate for the demands being made upon them and will have to be rebuilt. Two of the systems employ septic tanks for purification, but the others have no puri-

fication plants. There are practically no storm sewers, all surface water being carried in the gutters.

Paving was carried on in the same way, until recently but little was done. However, during the past year 11,460 linear feet of macadam were laid at a total cost of \$216,600. There have been organized districts for the laying of an additional 85,000 square yards of brick pavement, and 52,000 additional square yards of this paving are contemplated. About 40,000 square yards of asphalt is among the probabilities. The completion of this work will do much toward giving Little Rock excellently paved streets.

Little Rock's new city hall is one of the best in the South, both architecturally and from the point of view of convenience. For the construction of this the whole city was organized into an improvement district and bonded for the \$158,000 which it cost.

A few years ago the electric light plant was purchased by the city by the same plan. Instead of bonds, however, non-interest-bearing scrip payable in annual installments was issued. This plant is said to be operated at a cost much lower than that at which lights could be purchased, and it has recently been remodeled and enlarged, which necessitated practically discarding the old machinery and lamps. In place of the old belt-connected reciprocating engines, direct connected condensing turbines are used to drive the A. C. generators. The number of lamps will be increased from 350, the former number, by about 750 or more. It has been decided to substitute magnetite lamps for the series enclosed lamps previously used. The total cost of this improvement was about \$40,000.

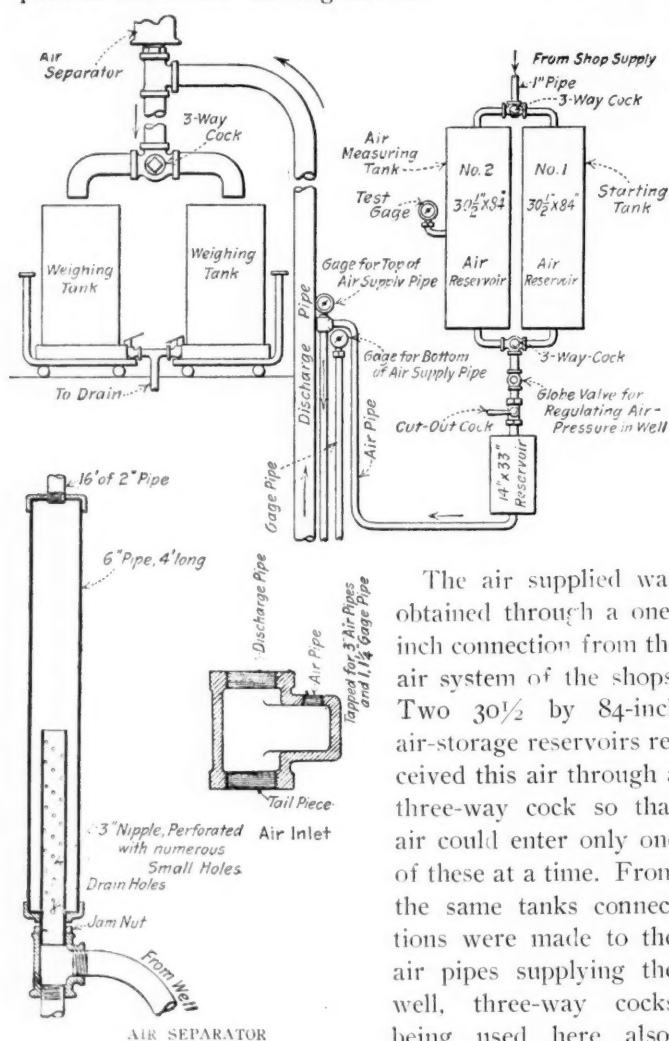
One rather unusual feature in connection with the police department is the fact that many of the officers, especially in the residence districts, are in plain clothes and cannot be distinguished by the possible law breaker from ordinary citizens, which is said to result in greater efficiency in preventing crime. These officers have their regular beats and report once an hour as do those in uniform. The police signal system is operated in conjunction with the telephone company.

The population of Little Rock is about 65,000. Its most rapid growth has taken place since 1900, when the city received increased railroad facilities.

The citizens, because of the inconvenience occasioned by the provisions under which they are required to obtain their public improvements, hope to induce the next legislature to grant them a new charter which will remove this handicap from their enterprise, permitting the city as a whole to bond itself for such purposes.

## AIR LIFT EXPERIMENTS

TESTS to determine the air required and other conditions connected with the raising of water by air lift were conducted a few months ago by the Westinghouse Air Brake Company at Wilmerding, Pa. Various sizes of pipe and combinations of lift above the surface of the ground water and submergence of pipe below such surface were experimented with to determine those most effective. One well was used, which had a 6-inch casing and was 174 feet deep, the water in which was ordinarily from 16 to 20 feet below the surface. A house was built over the well under an oil derrick, which derrick was furnished with platforms of various heights to provide means for altering the lift.



The air supplied was obtained through a one-inch connection from the air system of the shops. Two 30½ by 84-inch air-storage reservoirs received this air through a three-way cock so that air could enter only one of these at a time. From the same tanks connections were made to the air pipes supplying the well, three-way cocks being used here also.

The air in the shop system averages from 140 to 160 pounds' pressure and the storage tanks were charged to the same pressure. In the air pipe feeding the well was placed a Globe valve for the purpose of regulating the pressure at the well, which was always less than the storage pressure and was kept constant during any one experiment. To facilitate maintaining this constancy a small reservoir, 14 by 33 inches, was interpolated in the same lines. Of the two large tanks, one was used for measuring the air and the other for starting the pumping operations; the volumes of both being known by previous measurement.

Air was admitted into the discharge pipe through a pipe sleeve enlarged on one side, the upper surface of the enlargement being drilled and tapped for 3-inch air pipes and a 1¼-inch gauge pipe. When a large discharge pipe was used there was not sufficient room between this and the casing to permit the use of a large air supply pipe, so two or three smaller ones were employed. Any one of these could be closed at the top, thus permitting the varying of the supply of air, the effect of which was made note of. A pressure gauge was connected on the gauge pipe to measure the air pressure at the point of entering the discharge pipe. Another gauge at the top of the well showed the air pressure at that point of the air line. The discharge pipe discharged the combined air and water into an air separator where the water fell by gravity into one of two weighing tanks and the air escaped, the tanks resting upon platform scales by which the water was weighed.

More than 350 different combinations of size of discharge pipe, height of lift and depth of submergence were experimented with by nearly 1,800 tests. From the figures thus obtained curves were plotted to represent the information given thereby. From these it was found that the cubic feet of air used per gallon of water raised and the gallons of water delivered per minute are practically the same for each ratio of lift to submergence, whatever these may be, the discharge pipe diameter remaining constant. For example, with a submergence of 20 feet and a lift of 10 feet a given amount of air will lift the same number of gallons per minute as when the submergence is 200 feet and the lift 100 feet. It was also found that with a given size of discharge pipe the amount of water raised decreases inversely as the ratio of lift to submergence. Also the amount of free air used per gallon of water raised increases directly as this ratio, and for a given ratio it decreases as the size of the discharge pipe increases.

It was found that the best pressure to use was the least which would cause a continuous flow from the well. If the air pressure be reduced slightly below this, the water comes out in intermittent spurts, and while the air required per gallon is still less than that with continuous flow, the amount of water delivered was considerably less; on the other hand, if the air pressure be slightly increased the quantity of water would increase somewhat but the air required would increase in greater proportion and a point was finally reached where, as the amount of air was increased the amount of water actually decreased. This point of maximum efficiency of air was, after a little experience, easily recognized by the sound of the discharge. In starting a well a proper method was believed to be to open the valve very slowly; the air at first being less than required, intermittent flow results; but when the flow first becomes continuous the amount of air, as stated above, is that best adapted for efficiency.

The first result would appear to indicate that the economy of the plant increases with the depth of submergence, but it must be considered that the air pressure also must be increased in order to deliver the air under the

accompanying greater head, which requires a greater horsepower of compressor work. The quantity of air required to operate the well decreases with its depth, but the horsepower required to compress a unit volume increases. A curve representing the horsepower per gallon of water raised from varying depths with a constant lift will at first decrease as the depth increases and then, reaching a minimum point, will begin to increase. This minimum point or point of greatest economy, expressed as ratio of lift and submergence, for a given size of discharge pipe decreases as the lift increases, and for a given lift increases as the size of discharge pipe increases.

Among some of the details of construction and operation concerning which information was obtained, the use of a tailpiece in the discharge pipe below the air inlet was found to be necessary to prevent the air, when the pump was first started, from backing down into the well and rising outside of the discharge pipe (where the casing serves as a discharge pipe, this probably would not be so important). The results indicate that anything in the shape of a jet or pipe for introducing the air into the discharge pipe is not only useless but is actually detrimental. The enlarged sleeve not only offers little resistance to the water but makes it possible to install the air pipe very close to the discharge pipe.

The best size of air pipe depends upon the quantity of air required and the pressure; the velocity is dependent upon the size and is also directly proportional to the loss of pressure, and consequently reduction in size of air pipe requires increase in horsepower for compression work. It was found that one pound loss of pressure in 100 feet of pipe produced 27 feet velocity per second, two pounds loss produced 42 feet, and three pounds, 53 feet. In endeavoring to obtain a maximum economy, a comparison of cost of air pipe and cost of air compression (depreciation, maintenance, etc., being considered in each case), should be carefully studied.

#### Notes from Muskogee

This city, of about 20,000 population, is suffering from a former failure to appreciate the desirability of giving sufficient attention to proper planning of public improvements and to place them in the hands of competent officials. Until recently no concerted action had been taken as to paving. Individual contracts were made between contractors and property owners for paving in front of their property, and one of the results of this was that on streets where car lines were constructed or proposed the owners on each side paved only to the road bed of that line, with the result that there were long, unpaved stretches through the middle of brick streets. Moreover, each contractor established his own grades and, as might be expected, these do not combine into a desirable system. This latter was due to the fact that until within the last few months the city did not own even a single engineer's instrument, either level or transit. At present, however, a corps of engineers with necessary instruments are bettering conditions as rapidly as possible. The present city officials seem to have a proper understanding and appre-

ciation of their duties and are endeavoring to place things on a business basis.

The water supply is obtained from the Grand river and about one-third of it is filtered, while the remaining two-thirds is not. Plans, however, have been prepared for additional filters to remedy this unsatisfactory condition.

This is the largest city in the eastern part of Oklahoma, but it is behind many of the others in the matter of municipal improvements. It is now endeavoring to catch up and surpass these as quickly as possible. The general feeling of hopefulness of its future is indicated by the fact that some of the real estate is held as high as \$1,000 per front foot. In other words, it is at present a boomed town.

#### STREAM POLLUTION DECISIONS

##### New Jersey and Pennsylvania Cases—Paterson to Pay Damages to Riparian Owners—Mill Must Cease Polluting Schuylkill

IN the State of New Jersey an award was recently made by Vice-Chancellor Stevens of the State Court of Chancery in the case of damages claimed to be caused by the pollution of the Passaic river, which introduced some novel methods which may probably be accepted as a precedent in other cases. The city of Paterson discharges sewage into the stream and, the Courts of the State having ruled that riparian owners below the outlets could not claim damages unless the stream received more sewage than it could dilute to an inoffensive condition, no action was taken at first. In time, however, it became evident that a nuisance was being created and complaints to the Paterson Board of Health, to the State Board of Health and to the Legislature having resulted in no abatement of the same, owners of about twenty of the riparian properties, each from 150 to 600 feet deep, brought a suit for injunction to restrain the city from damaging the property owners. The court ruled that an injunction which would prevent the city from using its sewers would work a far greater injury than that being suffered by the property owners, and ordered that instead the city should pay damages in amounts to be settled by a Court of Equity.

Action in such a court was accordingly brought and the city agreed that it would cease polluting the river in the manner complained of within five years from that time. The matter therefore resolved itself into a determination of the amount of damages inflicted upon the owners from the time the damage began until the time promised for its discontinuance. In fixing the first date a large amount of testimony, both expert and otherwise, was taken by the court; but the former, calculated to show what amount of sewage can be discharged into a stream without creating a nuisance, was apparently considered of minor importance by the court. The testimony of the property owners indicated that not until 1892 did the condition of the river have any appreciable influence on the use of the stream for fishing or bathing, but that from then on the evidence of sewage pollution became



marked. This date was, accordingly, accepted by the court as that when the damage began, although the plaintiff endeavored to have it made earlier on the ground of the water being rendered unfit for drinking purposes as soon as sewage began to be discharged into it. This last contention was not admitted, however, as there was already such danger from other communities before the Passaic sewers were built.

The fixing of the amount of damages was even more complicated and difficult than determining their duration. The city contested that it was not responsible for contamination due to storm water from the streets, and the court admitted this to a degree only, holding that the city was not responsible for such storm water as flowed over the surface to the river, but was responsible for that discharged thereinto through the sewers. The contention of the city that it should not be held responsible for such injury as would have been done the river by a city of the same size as Paterson, but without sewers, was not admitted by the court. It was also contended that the industrial establishments of the city should stand their proportionate parts of whatever award was made, and although the court appeared to consider the city as responsible for about three-fourths of the total pollution and the industries for one-fourth, it does not appear to either admit or deny this contention, probably leaving this for settlement between such industries and the city.

In the final estimate, a territory or strip along the river which was considered to be influenced by the nuisance was first fixed upon. The annual rental value of each piece of property within this strip was then determined from expert evidence of those experienced in real estate values, the condition of the buildings and their locality with respect to the river and to transportation lines and other factors being taken into account. The court decided that the injury to this property amounted to 5 per cent. of the annual rental value in 1892 and increased one per cent. annually after that date.

Concerning whether this exact sum was a fair allowance or not there would probably be much difference of opinion, but it is of great interest to know the general method employed by the court in endeavoring to fix a value to an injury of this nature, and, as stated before, this general method is at least worthy of study by others to whom such a problem may be presented.

#### IN PENNSYLVANIA

The State law of 1905, establishing in Pennsylvania a State Board of Health and giving it certain powers, attracted considerable attention because of the comprehensiveness of such powers and the fact that they effected a complete reversal of the previous tendency of the State legislators to grant no control of river pollution. This law was described in full in the *MUNICIPAL JOURNAL* for October 3, 1906.

In February, 1906, the Commissioner of Health notified the owner of a hosiery mill, employing 150 to 200 hands, to cease discharging the sewage from these employees into the Schuylkill river. The owner neither complied with this order nor appealed from it to the

Court of Common Pleas, as the statute gives him the right to do. The Commissioner therefore brought suit against him, which has recently been decided by the court of final jurisdiction, the State Supreme Court. The mill owner claimed that the Act of 1905 was contrary to the United States Constitution, the Fourteenth Amendment declaring that "No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty or property, without due process of law; nor deny to any person within its jurisdiction equal protection of the laws." He also claimed that a clause of the State Constitution, prohibiting the Legislature from "granting to any corporation, association or individual any special or exclusive privileges or immunity," was applicable in this case, since the act permits water from coal mines or tanneries and sewage from municipal systems already constructed to discharge into the streams while refusing individuals and private corporations the same right.

The courts ruled that the only right interfered with in this case was that of discharging sewage from the land of the mill owner into the stream, and that this is not one of the privileges and immunities belonging to him as a citizen of the United States as distinguished from those of the citizens of the State in which the land and stream are situated. That this pollution did not result from the development of any natural resource of the land; that it was not unavoidable; that the defendant possessed no right of property and privilege of discharging sewage into the stream recognized by law prior to the passing of the act; and even if he had such property right, he was not in this case deprived of it without due process of law, since he had the right to appeal to the courts but did not exert this right. It was held that the statute was passed in the exercise of the police power of the State, which permits regulating the health, good order, morals, peace and safety of society, and that the preservation of the waters of the State from pollution is a proper exercise of this power. Also that it was entirely legal to except from the operation of the statute waste liquids which did not contain germs of disease. The contention that this law granted special privileges to municipalities in that they are permitted to discharge sewage into streams was overruled on the ground that such system was essential to the development of communities. Moreover, any person whose property is injured by such stream pollution is entitled to compensation therefor. The power of the State to make police regulations carries with it the power to discriminate between the needs of different communities and private parties: and, moreover, municipal corporations do not come within the article of the State Constitution above referred to, but under another article. Municipal and quasi-municipal corporations are agents of the State, authorized to perform such governmental duties as it may delegate to them, and they may therefore receive powers and privileges properly denied to individuals and private corporations.



## DEPRECIATION AND GAS RATES

Physical Depreciation—Increasing Inadequacy—Knowledge of Life of Gas Plant Necessary for Determining Former—Illustrated by Actual Cases

By ALTON D. ADAMS

DEPRECIATION is being put forward as the strongest bulwark against gas rate regulation, and if it can be made high enough there is small chance for reductions in the price of gas. The nature and amounts assigned to depreciation will thus determine whether many millions of dollars shall be paid over to the gas companies or retained by their customers.

Depreciation is an attribute of all structures, and runs with time. As soon as a gas plant is erected, wear, disintegration and decay begin. Joints of machinery work loose. Wood rots. Iron and steel lose their strength and are eaten away by rust. Even masonry settles and cracks, the joints wash out and the stones disintegrate. All this is physical depreciation. Gas plants, like coal, are thus consumed by use, though at a much less rapid rate, and their physical depreciation is often a proper annual charge against income.

Besides this physical depreciation, which is always present, there is in some cases a loss of value because equipment is not large enough for the demands of service, or because more efficient apparatus can be had on the market. Whether any such depreciation due to inadequacy or inefficiency has occurred, and whether its amount, if any, should be made good by the holders of gas stocks or by the consumers of gas, is a problem that requires special investigation in each case.

Though a particular plant or structure may thus never show any depreciation because of inadequacy or insufficiency, physical depreciation is certain to accrue from year to year, and its annual increment may be computed with reasonable accuracy.

For such a computation it is necessary to know the fair new cost of each part of the plant, its years of life, assuming a reasonable amount of care and repairs, and its residual value at the end of the period of service. Then the annual physical depreciation of a given part of the plant may be found by subtracting the residual value of the given piece of plant from its new cost, and then the division of the remainder by the life in years.

Assume for illustration that a certain part of a gas plant has a probable life of fifty years, that its new cost is \$10,000, and that at the end of fifty years its residual value will be \$2,000. The total depreciation during the fifty years is thus \$8,000, and the annual depreciation is \$160, or 1.6 per cent. of the new cost, on the above basis.

It thus appears that the life in years of gas apparatus is the key to the problem of annual depreciation, and as the gas industry is now more than one hundred years old, there is a large amount of experience as to the life of gas equipments.

Only by the persistent application of this experience to the solution of the problem of depreciation can the

amounts added by this item to gas rates be kept within reasonable limits. More than this, depreciation cuts both ways, and when the annual physical depreciation has been established for any part of a gas plant, its highest present value may be determined as soon as its age is known. By proper application of the records of experience as to the life of gas plants, both the amount that consumers should pay to make good annual physical depreciation, and the amount as dividends on the fair present value of a plant, can thus be determined.

It is fundamental that the proper annual amount to be covered by the gas rate for the current physical depreciation of a given machine or structure is also to be deducted from the new cost of that machine or structure for each year of its age, to obtain its highest assignable value at the present time. If this fair and logical rule is followed, the claim for less than the probable life of any part of a plant, in order to establish a larger sum for its annual depreciation by wear or decay, must result in a lower present value and correspondingly lower dividend charge on this part of the plant, according to the number of years that it has been in use.

A number of gas rate cases with which the writer has been connected illustrate the need of definite information concerning the life of gas plants as a basis for depreciation charges, and show also the inconsistent practice of demanding an exorbitant allowance for depreciation in the future while denying any corresponding reduction of value due to such depreciation in the past.

In one recent case the main dispute as to the cost of making gas related to the item for repairs and depreciation combined, which the company contended should be as much as 24 cents per thousand feet of gas sold, but which the writer put at not more than 12 cents. The commission that heard the case ordered a reduction of 10 cents per thousand in the price of gas.

A good example of the "just as good as new" fallacy is also furnished by this case. In spite of the large amount claimed for annual depreciation, most of the plant, large parts of which had been in use during 15 to 40 years, was valued as good as new, on behalf of the company. The "just as good as new" method of valuation was largely used for the gas company in another case, where its expert allowed nothing for depreciation in valuing water gas equipments that were nine or ten years old, but put them in at new cost. According to this expert, the combined cost of repairs and depreciation of the plant was over 25 cents per 1,000 feet of gas sold, though the testimony for the town was that 11.16 cents was enough for this item.

While nearly all of the above gas plant was ten to forty years old, the valuation given for the company placed its total loss by depreciation at only 4.2 times the sum that was claimed as the annual cost of this item. To state the matter in another way, the sums obtained by a division of the probable age of each piece of gas apparatus into the total amount of depreciation on it, as fixed by the expert for the company, when added together represented only 3.27 cents per 1,000 feet of gas sold during the latest fiscal year, as was brought out in

the testimony for the town, and yet this expert for the company claimed 14.1 cents as the necessary cost of depreciation alone per 1,000 feet of gas sold. In this case the rate charged for gas was \$1.75 per 1,000 feet, and the expert for the company stated in his testimony that it should be \$1.79 per thousand, but the commission that heard the case reduced the rate to \$1.45 per 1,000 feet.

A third case brings out again in a clear light the bearing of the life of gas equipment and of depreciation on the price of gas. In this case the computation of the annual cost of depreciation to be added to the price of gas was based on the new cost of the gas plant as fixed by the testimony of the expert for the company. The different amounts of depreciation named in the testimony for the company and for the city were thus due to the different lives assumed for the several parts of the gas plant, and also to the failure of the expert for the company to make any allowance for the residual value of the gas equipment after its term of use had expired.

Taking the plant at the new cost fixed by himself, and allowing such life for each piece of apparatus as he saw fit, the expert for the company concluded that the cost of depreciation alone was 16.95 cents per 1,000 feet of gas sold. On the new cost fixed by this expert for the company, but with periods of life for the several parts of the plant that experience indicates, including residual values, the writer concluded that the proper charge for depreciation was only 4.53 cents per 1,000 feet of gas sold by this plant. In this last-named case, the court decided that the gas rate of 90 cents per 1,000 feet, as fixed by the City Council, was legal and reasonable.

#### Garbage Disposal Data

A BOND ordinance providing for the obtaining of funds for a garbage disposal plant for the city of Scranton was signed by the Mayor of that city on July 3, which would seem to render practically certain the construction of such a plant. This action was preceded by an investigation conducted by a council committee which visited several plants and obtained information concerning them which has been furnished to us and from which the following summary has been prepared.

The new plant at Staten Island, the plans for which were described in this journal for December 5, 1906, is a Heenan and Froude incinerator of 60 tons capacity and had been in operation for one month when the information concerning it was obtained. About 26,000 people contribute ashes, rubbish and garbage, all of which are collected and burned together. The longest haul is three miles and 15 wagons are used for collection at the present time, although it is expected to reduce this number considerably by adding a helper to each wagon. It is estimated that from 20 to 25 tons per day were being collected and burned, one-fourth of this being garbage, one-tenth rubbish and the balance ashes. No coal is being used.

At Trenton is a Davis incinerator which has been in operation for seven years and cost \$35,000. Barns,

horses, wagons, etc., cost an additional \$29,000. The plant is located about one mile from the center of the city and the longest haul is four miles. The population is about 100,000, distributed over approximately 120 miles of streets. The cost of collection of ashes and garbage and operation of the incinerator, including the necessary clerk hire, is \$27,000 per year. It is estimated that 48 loads, or approximately 40 tons, are delivered at the plant per day. Two men are employed at the plant in winter and four in summer, averaging 11 working hours. Eight teams are used for collection and two additional teams are contemplated. About 400 tons of coal are used a year.

A Dixon incinerator is in use at Allentown, Pa., which has been in operation six years and cost \$14,275 without the grounds. An average of about eight loads of garbage per day is burned, approximating from 20 to 25 tons. The collection is made by the city, four wagons being used. An extra wagon is to be added in the near future. Two men are employed at the plant during the winter and four during the summer months. Garbage from wholesale stores and other large consumers is not delivered to the plant but is carted to the outskirts. The cost of collection is about \$5,500 per year and of disposal \$1,500 per year. About 50,000 population is distributed over 100 miles of streets.

Rochester has a reduction plant located centrally about 500 feet from the main street. The garbage is disposed of by a private five-year contract at \$60,000 per year. It has been in operation for about one year. About 195,000 population is distributed over 340 miles of streets. The longest haul is four miles, generally over level streets, the area of the city being 17.68 square miles. Twenty-five wagons are used for collecting garbage and 75 for collecting ashes and rubbish. The city is divided into nine working districts with ten men for each district. Dead horses are sold to a fertilizing company, but dogs and other small animals are reduced at the plant. Ashes and garbage are collected from the back yards, the garbage amounting to about 30,000 tons a year. The plant complete cost \$130,000. Eighteen men are employed at the plant. Grease obtained by the reduction sells at 3 cents per pound.

Syracuse, N. Y., also has a reduction plant, which was erected ten years ago. It is located  $1\frac{3}{4}$  miles from the center of the city and the longest haul to the plant is four miles. A population of about 125,000 is scattered over 125 miles of streets and a city area of 15 square miles. About 40 tons of garbage are reduced daily. Thirteen wagons are used for the collection of garbage, two men to each wagon. The city pays one of these men \$1.90 per day. The reduction is by contract, the original contract price being \$26,000 per year. About 2,500 tons of garbage are not delivered to the plant. The cost of collecting the garbage is \$31,000 per year. Of the products of the reduction the grease only is sold, the tankage being used for fuel. For collecting the ashes 12 to 15 wagons are used, and the cost of this service is \$27,000 per year.

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AUGUST 19, 1908.

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## Special Assessments

A number of items concerning municipal taxation happen to find place in our news columns this week, five in the department of Legal News and others among the News of the Municipalities, which show that, while the details of taxation methods vary in different States, the fundamental principle is found in all—that it is based upon special benefits conferred and should be in proportion thereto, and must not exceed them. The Massachusetts Supreme Court holds that sprinkling a street is such special benefit, and assessments therefor by the front foot are legal; the Kentucky Court of Appeals decides that such benefit is general, does not increase the value of ad-

jacent property, and cannot be assessed on property owners. But neither casts any doubt upon the principle stated.

## Sewage and Water Supply Table.

In studying problems connected with the designing of water supply and sewerage systems it is frequently necessary to estimate the quantities consumed or discharged by assumed populations in the various subdivisions of the area under consideration. As the rate of consumption is given in gallons per day, while the flow of sewage or flow-off of drainage areas is calculated in cubic feet, the calculation becomes tedious if often repeated. To facilitate this and prevent possible errors, the following table has been prepared for private use, and is offered to our readers:

CUBIC FEET PER MINUTE CORRESPONDING TO A RATE OF CONSUMPTION PER DAY OF—

TRIBUTARY POPULATION	100 Gallons	150 Gallons	175 Gallons	200 Gallons	250 Gallons
100	0.93	1.39	1.62	1.86	2.32
200	1.86	2.78	3.25	3.71	4.64
300	2.79	4.18	4.87	5.57	6.96
400	3.71	5.57	6.50	7.43	9.28
500	4.64	6.96	8.12	9.29	11.61
600	5.57	8.36	9.75	11.14	13.93
700	6.50	9.75	11.37	13.00	16.25
800	7.43	11.14	13.00	14.86	18.57
900	8.36	12.54	14.63	16.71	20.89
1,000	9.29	13.93	16.25	18.57	23.31
2,000	18.57	27.86	32.50	37.14	46.42
3,000	27.86	41.79	48.75	55.7	69.6
4,000	37.14	55.7	65.0	74.3	92.8
5,000	46.42	69.6	81.3	92.9	116.1
6,000	55.7	83.6	97.5	111.4	139.3
7,000	65.0	97.5	113.8	130.0	162.5
8,000	74.3	111.4	130.0	148.6	185.7
9,000	83.6	125.4	146.3	167.1	208.9
10,000	92.9	139.3	162.5	185.7	232.1
11,000	102.2	153.2	178.8	204.3	255.3
12,000	111.4	167.2	195.0	222.9	278.5
13,000	120.7	181.1	211.3	241.4	301.7
14,000	130.0	195.0	227.5	260.0	324.9
15,000	139.3	208.9	243.8	278.6	348.2
16,000	148.6	222.9	260.0	297.1	371.4
17,000	157.9	236.8	276.3	315.7	394.6
18,000	167.1	250.7	292.5	334.3	417.8
19,000	176.5	264.7	308.8	352.8	441.0
20,000	185.7	278.6	325.0	371.4	464.2
21,000	195.0	292.5	341.3	390.0	487.4
22,000	204.3	306.5	357.5	408.6	510.7
23,000	213.6	320.4	373.8	427.1	534.0
24,000	222.9	334.3	390.0	445.7	557.2
25,000	232.2	348.2	406.3	464.3	580.5

Illustration: To find the amount of house sewage contributed by an area of 37 acres, assumed average density of population 70 per acre; consumption 100 gallons per capita per day.

Population = 2,590; sewage =  $[18.57 + 4.64 + 0.84] = 24.05$  cubic feet per minute, average. If the maximum rate of flow is taken at 75 per cent. greater than the average, use 175 gallons per day, and the result is  $[32.50 + 8.12 + 1.46] = 42.08$  cubic feet per minute.

## Court Forbids Stopping Ferries

SOMEWHAT in line with decisions regarding the necessity of continuance of the supply of public utilities, such as water and street railroad, when franchises have expired, is the action of the New York Supreme Court in granting a temporary injunction forbidding the companies operating ferries to Brooklyn from ceasing to operate, July 31, as they threatened to do. The companies claim that they have been losing money for some time and they recently failed to effect the sale of their properties to the city. The case will be argued later in the Fall.



## NEWS OF THE MUNICIPALITIES

### Divers Subjects of General Interest and Their Treatment by City Councils and Officials—Streets, Water Works, Lighting and Sanitary Matters—Police and Fire Items—Government and Finance

#### ROADS AND PAVEMENTS

##### Long Street Through Farm Land Will Be Paved

Burlington, Ia.—Sunnyside, one of the longest streets in this city, is to be paved its entire length in the near future. The street extends from one city limit to the other and much of the property abutting the street is farm land. Although the legal assessment derived from this property would not begin to pay for the cost, the return value of the pavement has been fully promised by citizens anxious for the improvement, and who are more than willing to pay their full share of the assessment.

##### Test Asphalt Ordinance

Fond du Lac, Wis.—The validity of the city ordinance prohibiting traction engines from passing over the asphalt streets is to be tested. Warrants were issued for the arrest of two Lamartine farmers, on the charge of having run a traction engine over the West Second street pavement with disastrous results.

##### Unlawful to Lay Any But Concrete Sidewalks

Knoxville, Tenn.—Under an ordinance recently passed by the City Council it is unlawful to put down any sidewalk in the city limits except of concrete. The specifications provide for inspections by the city inspector and every safeguard is thrown around the ordinance to give the property owner a good sidewalk and protect him against any inferior work.

##### Good Repairs to Bad Pavement

Long Branch, N. J.—Repairs to a 14-year-old asphalt pavement were recently completed in a manner highly satisfactory to the city, but presumably not so pleasing to the company. The pavement was in very bad order, in fact the question of resurfacing it was seriously considered. However, Superintendent Winslow Brackett got to work with heating pans, old and new material, and a gang of thirty or forty men. In the course of a few weeks about 15,000 square yards were laid at a cost of about as many dollars, with the result that the street looks about as good as new. The price paid the company for the work is \$2,500 a year, and it has been a losing proposition nearly every year.

##### Plans To Do All Repairs with City Forces

Pittsburg, Pa.—The superior facilities of the city for repairing and patching portions of streets, defective by reason of the laying of service pipes, may result in the Bureau of Highways and Sewers doing much of the patch work on block, stone and asphalt streets that for years past has been awarded to contractors. Superintendent John F. O'Toole, of the Bureau of Highways and Sewers, has formulated a plan for keeping the streets in excellent shape. This conforms with the idea of Mayor Guthrie, and it is likely that before next spring the city will be authorized by Councils to patch and repair streets which have been rendered defective by excavations.

##### Paving Problem Again Solved

Portland, Ore.—The Pacific Bridge Company is preparing to introduce a new pavement in Portland, which, according to Manager George Simons, is destined to revolutionize the paving operations in the city. The inorganic portion of the pavement is to be gravel dredged out of the river and coal tar will supply the cementing material. For the foundation gravel will be used just as it is found. For the surface, the gravel will be crushed, screened and laid in a manner said not to conflict with any patent rights. The cost of the pavement is to be \$1.25 or \$1.50 per square yard as compared with \$2 and \$2.20 for asphalt and bitulithic. Even the cost of maintenance has been figured out, only 2½ cents a year for a ten-year guarantee period.

#### Cities and Counties Cooperate for Inter-State Road

Savannah, Ga.—Definite details for a speedway between Savannah and Charleston, S. C., will probably be arranged within the next few months. The section of the road from Savannah to Beaufort, S. C., has already been arranged for by cooperation of the City of Savannah and the counties of Chatham, Ga., and Beaufort, S. C., for the construction of a highway with necessary bridges for a distance of thirty-two miles along the line of the old Charleston and Savannah stage road.

#### Improvement in Walks in Business Section

Utica, N. Y.—Conspicuous improvements have been made this summer in the appearance of the business section of the city. New cement walks have been laid on Genesee and other central streets. This has been the result of agitation started last winter by President Baker of the Council, who says he was led to give attention to the matter by his observation that whereas the city was spending thousands of dollars, up into the millions, in fact, to provide proper places upon which dumb animals might travel, the ways which humankind must tread were left in a condition unfit even for the animal kingdom.

#### SEWERAGE AND SANITATION

##### Payment of Royalties to Cameron Company to Be Resisted

Columbus, O.—A conference of representatives of the sanitary authorities of several States was held in Columbus, August 6, to consider plans for resisting the demands of the Cameron company for a 10 per cent. royalty on the cost of disposal plants using septic tanks. Twenty-five plants of this sort are in use in Ohio alone and hundreds are in contemplation in various parts of the country. The amount claimed from Columbus for infringement of patents is \$40,000. The demand for payment will be resisted and suits going into the question more exhaustively are anticipated.

##### Forcing Sewage Disposal Installation

Columbus, O.—Acting under authority conferred by the new Bense law, the State Board of Health is preparing to force the city of Van Wert to erect a sewage disposal plant. This is the first procedure of the Board under the act. The action is to be taken at the instance of residents below the city whose water supply is being polluted by the sewage from the city. It is stated that the city will resist the move of the Board and carry the matter into the courts to test the constitutionality of the law. A similar action is being contemplated against Greenville, in Darke County.

##### No Spitting in Easton

Easton, Pa.—Following the example of large cities, and more recently many small ones, Easton has adopted an anti-spitting law, and the measure has been signed by Mayor McKeen. People who have been in the habit of spitting tobacco juice over the sidewalks or on floors of public buildings will be placed under arrest and fined for their offenses if they are continued. Notices of warning have been posted.

##### Ordinance Regulates Slaughterhouses

Evansville, Ind.—A new ordinance, in thirteen sections, regulates every phase of housing of animals, slaughtering, curing and packing of meats, reduction of by-products, and the disposition of all offal and waste. Blood can not be emptied into Pigeon Creek or into any sewer. Condensers must be used to destroy all odors. Drainage must be screened and made odorless. Health officers must be admitted to any plant at any time, day or night. Hog hair can not be dried in lofts or in the open. Violators of

any feature of the ordinance may be declared as maintaining nuisances, and subject to ouster. Penalties ranging from \$25 to \$200 are provided.

#### Health Officer Suggests Separate Cups for Pupils

New Orleans, La.—As a measure for the protection of the 37,000 school children of New Orleans, City Health Officer W. T. O'Reilly will make a suggestion to the School Board that, beginning at the next term, all pupils be compelled to bring their own drinking cups, and that common cups and dippers for the use of all be abolished.

#### Mayor Opposes Sewer Cleaning by Contract

Paterson, N. J.—Mayor McBride has vetoed a resolution calling for cleaning the city sewers by contract. He says that new plans should not be tried unless they would result in economy and no reasons why the contract would save money were stated. The fact that work done would be out of sight where it might easily be neglected should discourage experiments in this line. The drains at present are in good condition, and the same organization that put them in that shape should easily maintain them clean. Finally, he says, the specifications are vaguely drawn.

#### Streams Used as Sewers to Be Covered

Pottstown, Pa.—Through the efforts of the Board of Trade, backed by State Health Commissioner Dixon, the open sewer nuisance is about to be abated. For years the natural water courses running through the town have been used as sewers. Now an arrangement has been made for arching them over. They will continue to drain into the Schuylkill until a disposal plant is built.

#### Typhoid Epidemic Arises from Polluted Spring

Scranton, Pa.—Twenty-eight cases of typhoid fever have developed in the last month. The infection is believed to have come from an old household spring, as all the patients drank water from that source. Analyses of samples of this water are said to have failed to show any trace of bacillus coli. The test, however, showed 3,800 bacteria per cubic centimeter. Samples of blood from the patients, in half the instances, when subjected to the Widal test failed to confirm the diagnosis of typhoid, though there seems no doubt all have the disease.

#### Would Reorganize Board of Health

Woonsocket, R. I.—There is a reasonable probability that Dr. William C. Monroe, the city's Health Officer, may see this fall the fruition of his desires for a reorganized Health Department. For years in his annual reports he has advocated that the City Council reorganize the Board of Health and place it in charge of a Superintendent of Health, who shall be a physician, and allow the latter a competent and alert officer of seasoned judgment to assist the Superintendent of Health and act under the latter's direction in the matter of abating nuisances, obliging people to keep their premises clean, looking up sources of infection and making himself generally useful in the department.

#### WATER SUPPLY

##### Acquires Valuable Addition to Watershed

Asheville, N. C.—After many years of litigation, Asheville, by a compromise agreement, acquired the Dillingham tract of 2,500 acres of land for use as part of the city watershed on the north fork of the Swannanoa river. This, together with the 7,000 acres previously acquired, gives the city 9,500 acres of the finest watershed east of the Rocky Mountains, including the virgin forest, the hills and vales, waterfalls and rapids, located on the mountain side of the great Craggy mountain. The price agreed on is \$8,000.

##### Camden's Water Projects

Camden, N. J.—In automobiles the Water Committee and other members of Camden Council have been touring the county in search of a suitable site from which an additional supply of

water can be obtained in accordance with bids now being held under advisement. Four suitable lakes were examined which would make an available supply of 24,000,000 gallons daily. It is planned to build a reservoir at Signal Hill, about the highest point in Camden County, with a capacity of about 20,000,000 gallons. The water then would flow by gravity through mains along the White Horse turnpike as far as Camden and would supply all the suburban boroughs and towns along the line.

#### Water from Gas Well Averts Famine

Fairmount, Ind.—In order to prevent a water famine consumers were entirely without water for a few hours recently, while connections were made with the old gas well. To test the theory that the gas well contained salt water in injurious quantities, Marshal Jones connected the well with a steam pump which has been at work continuously since that time, throwing a steady stream into the creek. At no time was there any trace of salt water. With the additional well at the command of the engineers it is now thought that all danger of a famine is passed, although it is not advisable to waste the water for any purpose.

#### City Fathers Told to Reject Advice of Curbstone Experts

Lebanon, Pa.—Mayor Geo. B. Marquart has sent a message to Councils commenting on the recent election in which, by a vote of 1,170 to 1,066, citizens rejected the proposed plan for the extension, improvement and filtration of the water supply. The Mayor urges Council to reject the advice of curbstone experts and listen to the counsel of expert engineers. He expresses the belief that Council will still find a way to solve questions of better water supply, and sewerage as well, and adds that, if they do not succeed, they may expect drastic action on the part of the State authorities.

#### Pumping Station Fails to Meet Demand

Madison, Wis.—Water pressure was recently so low for several days that the pumping station would have been unable to supply water for the Fire Department in case of an alarm. A similar condition of affairs has developed annually for the last ten years. All sprinkling wagons have been taken off in spite of complaints from citizens regarding dusty streets. Every precaution was taken to store water for emergency purposes. The city fortunately has fourteen fire cisterns in various parts of the city, but longer time is required to connect with a cistern than a hydrant and one engine would exhaust a cistern in twenty minutes.

#### Springfield Water Basin

Philadelphia, Pa.—The most recent addition to the system of the Springfield Water Company is the basin in course of construction at Broomall, near Newtown Square. This reservoir will contain 5,000,000 gallons of water. It is 490 feet above tide. While intended only for auxiliary purposes, the basin is one of the largest of the seven dotted over the system. The ordinary manner of reservoir construction has been observed in this case, the bed being concrete, with 16 inches of solid masonry below. The earth embankment around the concrete walls will be sodded and embellished with flower gardens, to conform in appearance with the reservoir at Secane. The new basin will supply the towns between Media and Devon.

#### Engineer Reports on Hetch Hetchy Plan

San Francisco, Cal.—A progress report by the City Engineer upon the acquisition of a Sienna water supply calls attention to the fact that the grant made by Secretary Garfield requires that the city acquire lands in the reservation and that it submit to popular vote within two years the acceptance of the grant. The Engineer goes into details of the proposed system to connect with reservoir to be constructed at Lake Eleanor and in the Hetch Hetchy, and concludes with the recommendation that a bond issue of \$500,000 be made available for the purchase of lands and rights of way. It is suggested that the proposition be submitted to the voters in November.

## STREET LIGHTING AND ELECTRIC POWER

### Discards Gasoline Lamps

Camden, N. J.—Residents of the East Side are jubilant over the removal of the old gasoline lamps. They were never a success and were the cause of much complaint. Arc and incandescent lamps take their place.

### Village Board Passes Formal Resolutions Requesting Light

Lowville, N. Y.—The contract for lighting the streets and public places of the village, held by the Wetmore Electric Company, expired in May last and was not renewed, but service has been continued in the meantime at the old rates. The company desired a new franchise for five years and the village instituted proceedings to condemn the plant and operate it under municipal ownership. About July the corporate limits were extended and the village ordered the company to extend its lines and install lights. This it has failed to do. Accordingly the Village Board has passed a resolution reciting the circumstances and stating that it is the sense of the Board that the company should supply the service as required. A copy of the resolution was formally delivered at the office of the company.

### Town Improves Street Lighting

Methuen, Mass.—As a result of information gained by a committee visiting Gloucester and other places, it has been voted at a town meeting to change the 240 20-candle power incandescent lights to 40-candle power Tungsten lamps. The price for the new lights is \$17 each a year, and they will burn until 12:45 a.m. instead of 12 p.m.

### Rules Regarding Testing of Electric Meters

New York, N. Y.—The Public Service Commission has arranged to add to the usefulness of the testing bureau by providing for the examination of electric meters when complaints are made by customers who are doubtful of the accuracy of the bills sent to them by the electric lighting and power companies. A laboratory provided for tests has been established. Under the law creating the commission, an electric meter is deemed to be correct for purposes of complaint test which registers within 4 per cent. of accuracy. The law also provides that a fee shall be charged for all such tests, which is to be paid in the first instance by the consumer requesting the test. The fee, however, is to be returned to the consumer if the meter on test shows an inaccuracy to his prejudice of 4 per cent. or more. Under this provision of the law the Commission has established a scale of fees to meet the varying conditions that are to be found in a city the size of New York. This scale of fees is as follows:

For a meter with a rated capacity of 10 amperes or less....	\$1.50
For a meter with a rated capacity of 15 amperes or less....	2.00
For a meter with a rated capacity of 25 amperes or less....	2.50
For a meter with a rated capacity of 50 amperes or less....	3.00
And for each additional 25 amperes or fraction thereof....	.50

It will be the practice of the Commission to test all electric meters concerning which complaints have been made, under actual conditions of use, both as to location and amount of consumption.

## FIRE AND POLICE

### Incendiary Burns Fire House

Chester, Pa.—The Norwood Fire Company's remodelled and enlarged building on Winona avenue was burned, August 2. The fire occurred at night and was of incendiary origin. The bell rope had been cut so that the alarm could not be sounded and the hose about the nozzle had been severed. The fire house was a brick structure, two and a half stories high, and would have been ready for occupancy in about ten days.

### Linemen Put Under Fire Chief's Orders

Harrisburg, Pa.—The linemen of the electric companies who in the past have been going to all fires, will in the future be under the authority of the Fire Chief while the fire lasts. This, presumably, will be the means of giving a lineman authority to

cut wires belonging to companies other than that which employs him. Authority will be given these men to ride to fires in the apparatus, provided they wear badges to establish their identity.

### Will Keep Cellars Free of Rubbish

Indianapolis, Ind.—Business men who are not careful to keep their cellars and premises clear of rubbish and debris are to be arrested. This is the substance of an ultimatum given out by Sam W. Pugh, the city's cellar inspector, to-day, when he caused to be printed circular letters bearing copies of the "rubbish ordinance" and instructions to business men to keep their places cleaned. The reason for the inspector's action is to lessen the danger of downtown fires. Pugh said many business men were careless to a point that was almost criminal, and it was to reach this class that he decided to cause arrests. He said there was a mistaken impression among many business men that oiled rags or waste were necessary in rubbish to cause spontaneous combustion. As a matter of fact, almost any kind of damp rubbish might ignite from combustion, he said.

### Mayor's War on Crooks

Philadelphia, Pa.—By special direction of Mayor Rebyburn the Detective Bureau has begun a crusade on "lemon pool" men and other crooks that have been preying upon the public for several months and who are to be found daily on the principal streets of the city on the lookout for victims. The Mayor, it was intimated, was influenced by a number of letters he has received during the past few weeks from young men and some old ones, too, some of them strangers in Philadelphia, who have been fleeced out of thousands of dollars. The Mayor's orders, it was stated, not only included the lemon pool crooks or pool sharpers, but other sharpers with which the city is infested as it has never been before. Pickpockets, general thieves, corner loungers and suspicious characters in general also come within the scope of the order.

### Eight Fires in Eight Hours

Rochester, N. Y.—Eight fires in eight hours did \$100,000 damage here, destroying a cold storage plant with a loss of \$75,000, and several smaller concerns. The fires with two or three exceptions are believed to be the work of incendiaries. Detectives are investigating them. The first three alarms were for blazes in Fairport, Rochester's suburb. The alarms came within 45 minutes. An attempt was made to burn the plant of the Merchants Despatch Transportation Co., manufacturers of cars, at East Rochester, and the Gleason cold storage and other blazes in the city followed. With two or three exceptions, every piece of fire-fighting apparatus in the city was in service, and only one chief was in reserve for trouble in the business section of the town. had it occurred.

### High-Pressure System from Single Mains

Seattle, Wash.—Fire Chief Harry W. Bringhurst believes that a system of individual mains running back from the water front and supplied with water under high pressure from fireboats would be a good starter from which a regular high-pressure system with a pumping station could be developed later. The business district of Seattle is peculiarly adapted to a system of this kind. Additions could be made from year to year, all with a view to a complete plant at some future time. The fact that Seattle has no fire cisterns within its limits makes the need of an auxiliary system urgent.

### School Buildings Are Made Safer

Trenton, N. J.—Following the recommendations of Building Inspector George H. Stevenson, the Board of School Commissioners is engaged in extensive work in giving all public schools better fire protection. One of the principal improvements is the cutting of additional doors to the class rooms of the first floor. The new doors open directly into the yards, permitting children to pass out without danger of blocking the hallways. Metal ceilings are also being placed over the furnaces.



### Police Hampered by Imposition of Light Penalties

Washington, D. C.—Superintendent of Police, Maj. Richard Sylvester, in reporting to the Commissioners upon a complaint by Alexander H. Galt regarding the noisy and unsatisfactory operation of cars by the Capital Traction Company, says that the police are hampered in their efforts to control the motormen by the failure of the judges of the Police Court to impose heavy penalties in cases of conviction. The matter will be taken up with the Interstate Commerce Commission.

### After Alms Seekers

Wilkes-Barre, Pa.—Determined to break up the practice of soliciting on the streets, Chief of Police Long has started a crusade against these annoying offenders. Recently there have been a number of complaints entered at police headquarters relative to these men, who are too lazy to work and go around begging from respectable and hard-working persons. The Mayor will probably deal severely with this class of prisoners, as he has no sympathy with the vagrants that invade the city.

## GOVERNMENT AND FINANCE

### Nine City Bureaus Show Deficits

Boston, Mass.—Although Mayor George A. Hibbard but a few weeks ago sent confidential letters to the heads of the different city departments warning them to keep their expenses within the appropriations and threatening to ask for their resignations should they fail, nine city departments will have deficits, aggregating \$172,900, this year. The collecting, hospital, institutions, registration, poor, park, printing, public buildings, penal institutions and weights and measures departments are those in which there will be deficits. The hospital department ascribes its deficit of \$75,000 mostly to the recent scarlet fever epidemic. The penal institutions department ascribes a deficit of \$23,000 to the unusually large number of inmates.

### Aldermen Would End Lodging House Commission

Boston, Mass.—The City Council has passed a resolution requesting the Mayor to dissolve the Lodging House Commission. The resolution states that undesirable notoriety has been thrust upon the South End district through the inquiry of the Commission which has resulted not only in an injury to the character of the district, but in direct financial loss to many of its householders. Moreover the consequent agitation has created a sentiment not only hostile to the Commission but wholly adverse to its continuance, thereby destroying any possibility of cooperation between the lodging house keepers and the Commission, which is necessary in order to secure any practical results.

### Good Work Done by Board of Assessors

Chelmsford, Mass.—The new, separate Board of Assessors, who are serving their first term have succeeded in reducing the tax rate to 13.80, a drop of 20 cents per thousand from last year. When they first took office they made a study of the subject of taxation and consulted with the Board of Assessors of Lowell, the State Tax Commissioner and Representative Dean of Brookline, an authority on taxation. They discovered that a large amount of property was escaping taxation. They raised the valuation of personal property from \$599,000 to \$1,115,020; real estate from \$2,699,325 to \$2,925,910. It seems that heretofore a very low valuation had been placed on the personal property of corporations. This was discovered by comparing the town return with the returns made to the State as required by law.

### Auditor's Examiners Praise Davenport

Davenport, Ia.—The expert accountants of the State Auditor's department after examining the books of the city of Davenport report that the tax levy of 60 mills for all purposes of State, county, school and city taxation is one that cannot be equalled by any other city in the State. The debt is small, only \$275,000 and there is over \$108,000 in the sinking fund. The city is also congratulated on the commodious quarters provided for the transaction of city affairs. A loan of \$10,000 from the fire fund for

the general fund is criticised as improper and the records of the library board are found fault with. The books of the various departments are well kept, those of the Park Commission conspicuously so.

### Movement Inaugurated for Commission Government

Minneapolis, Minn.—A committee of the joint Improvement Association composed of twenty-five hundred leading residents, after having studied the government in Galveston, Houston and Dallas, Tex., Sioux City and Des Moines, Ia., have reported in favor of a commission form for Minneapolis. They recommend that a systematic campaign of education be inaugurated with a view to establishing this form of government and that the association do everything in its power to assist in such a campaign.

### Abutting Land Worth Less Than City Sewer

Rochester, N. Y.—There is a deficit of \$270,000 in the fund for the payment of the west side sewer bonds and litigation will result. The trunk sewer was constructed in the town of Gates and in several outlying wards of Rochester. The assessments have not been collected because their amount in many cases exceeded the value of the land through which the sewer passed. Some of the bondholders were paid in full and now those who have received nothing are suing the more fortunate ones for a proportional share of the payments.

### Town Too Poor to Feed Fire Horses

West New York, N. J.—The town is in such bad shape financially that it cannot even get a bag of oats to feed its team of fire horses. The engine driver recently had to borrow a day's supply from a teamster friend who likes animals too well to see horses go hungry. The police have not been paid for a month and school teachers and janitors have not been paid for two months. Bankers are clamoring for interest on bonds, loans and improvement certificates, and contractors are clamoring for money also. On top of all this the members of the Board of Education are under indictment, and Justice Swayze has ordered a summary investigation of the town's affairs. Property owners have asked the courts to review the action of the Council in confirming the Assessment Commissioners' report on the \$200,000 lateral sewer, and the Chancery Court has tied up the assessment and bond funds. The town may lose the team of hungry horses, for it has not paid the \$900 they cost.

## REFUSE COLLECTION AND DISPOSAL

### To Stop Garbage Dumping

Grand Rapids, Mich.—Alderman Thomas Doran, accompanied by two of his constituents, appeared before the Board of Health and made a remonstrance against the promiscuous dumping of refuse and garbage on Jackson street. The two residents stated that they had found cartloads of refuse dumped near their homes but had been unable to detect the violators. The health officer will place inspectors on the watch that the offenders may be made to answer for their acts. In dealing with the case Commissioner Schurtz stated that not only the middle classes in the city were guilty of such violations but also the best educated people. Only a few days ago a prominent attorney caused a lot of garbage to be dumped on property in violation of the local ordinances and was compelled to return and repair the damage he had caused under pain of arrest.

### New Haven Committee Collects Data

New Haven, Conn.—A committee of the Board of Aldermen, appointed to look over the garbage situation, have inspected the incinerating plant on Staten Island, N. Y. Chairman Miller, of the committee, says that data have been collected regarding several systems but that no special style of plant will be favored in the report. As to the probable cost of the plant, the first expense is placed in the neighborhood of \$100,000. Of this \$60,000 will represent the cost of erection of the plant and \$30,000 that of collection of the garbage, which will cost much more under any new system, it is generally agreed, than under the pres-

ent method. The other ten thousand dollars represents various incidental expenses. After the plant is once established he estimates the cost of running it will be in the neighborhood of \$25,000.

#### **Garbage Disposal Plan with Ten Incinerators Proposed**

Seattle, Wash.—Ten districts with an incinerator in each, is what is needed by Greater Seattle for the collection and destruction of garbage, according to City Engineer R. H. Thomson and Assistant Corporation Counsel King Dykeman, who have gone over the proposition carefully. This opinion was given to the finance committee of the council by Mr. Dykeman and came as a surprise to the members, who believe that \$300,000 would be sufficient to install a system such as has been advocated by Councilman Eugene Way, who favors the issuance of bonds to make the installation. The present incinerator cost in the neighborhood of \$50,000, and it is estimated that the other nine will cost at least \$30,000 each, making an investment of \$270,000 for buildings alone. No action was taken by the committee beyond delegating Mr. Dykeman and Mr. Thomson to work out plans for a system of collection and destruction along the lines recommended.

### **PARKS AND OUTDOOR ART**

#### **Special Terms Offered City for Park Land**

Chattanooga, Tenn.—The Board of Park Commissioners are considering a proposition to purchase land at Hill City, a point of considerable elevation, for park purposes. Because of the large amount of property owned by one corporation in this section, and of the great increase in value this park would bring about, the city will possibly be able to secure the land wanted for a nominal price, provided they will contract to expend a specified amount each year on improvements.

#### **Park Board Approves Private Work of Superintendents**

Grand Rapids, Mich.—The Park and Cemetery Commissions have adopted formal resolutions in reference to criticisms that have been made against the superintendents of the public parks on account of their being engaged in private landscape work. The Board takes the ground that the performance of such work for citizens of Grand Rapids results in the substantial improvement in the appearance of the city; and that when done for neighboring towns, they are simply doing a neighborly act which tends to raise the prestige of Grand Rapids in matters of outdoor art, besides having a tendency to educate the superintendents and give them larger experience. Finally, the Board holds that the fine condition of the parks and cemeteries does not indicate any neglect and it would be unwise to cripple the usefulness of the superintendents by holding them down to hard and fast rules.

#### **To Abolish Billboards on City Property**

Lowell, Mass.—A Committee of the Board of Trade has taken an inventory of all the billboards in the city and has communicated with the authorities requesting that the leasing of boards on city property be discontinued, when the time comes for their renewal. The Committee says that the revenue received is a trifle compared with the harm done to the beauty of the city.

#### **Improvement Association Finances the Purchase of Park**

Newton, Mass.—The Auburndale Improvement Association, after a year's work, have succeeded in raising sufficient funds for purchasing the Nye estate in Auburndale for a public park. The city of Newton will contribute \$2,400; Mrs. Nye has left \$2,000; and the balance was raised by general subscription. The land is in the vicinity of the Boston and Albany railroad station.

#### **Land Purchase Completes Park System**

Racine, Wis.—The appropriation by the Council of \$15,000 for park purposes guarantees the immediate completion of the present park system, the purchase of the Erskine woods, the purchase of the Cape property on the north beach and the immediate establishment thereon of bath houses sufficient for all the

needs of the city. The appropriation is a part payment on a total of approximately \$50,000. The erection of the bath houses on the north beach will be taken care of by private subscription.

#### **Park Projected on Ensign Peak**

Salt Lake City, Utah.—Lon J. Haddock, secretary of the Manufacturers and Merchants Association, is urging upon Mayor Bransford the desirability of establishing a park on Ensign Peak. It seems, on looking over old maps, that the ground belongs to the city, and, in fact, it was originally laid out as a public park. Mr. Haddock suggests that the chain gang can be employed late in the season (to make preliminary improvements) when the road work on the outskirts of the city is finished. The need of water for irrigation purposes is a possible difficulty, as the city has little to spare; but there are some springs not far from the hill which it is believed will furnish a satisfactory supply. The Mayor has promised to have the City Engineer examine the ground and report on nature and cost of improvements.

#### **Would Regulate Signs**

Washington, D. C.—Corporation Counsel Thomas has recommended to the District Commissioners that the police regulations regarding signs in front of business places be amended. He advises that no sign or advertisement be suspended from or attached to the roof or outer wall of any building without a permit. The small, new-style, triangular signs that have been recently placed on the grass plots in front of places of business will also be regulated in some way.

#### **Using Electric Light to Kill the Tree Pests**

Zittau, Germany.—The Saxon authorities have discovered what would seem to be an excellent way to put an end to the caterpillar plague, which is having such a disastrous effect on the local forests. They have discovered a method to catch the brown nun moths that lay the eggs from which the caterpillars come in enormous quantities. They make use of what they call the electric light trap. This consists of two large and powerful reflectors placed over a deep receptacle, and powerful exhaust fans. The whole has been erected on top of the municipal electric plant. At night two great streams of light are thrown from the reflectors on the wooded mountain sides half a mile distant. The results have been astonishing. The moths, drawn by the brilliancy, come fluttering in thousands along the broad rays of light. When they get within a certain distance of the reflectors the exhaust fans take up their work and with powerful currents of air swirl them down into the receptacle. On the first night no less than three tons of moths were caught. It has been decided to build another trap on the Rathaus tower and the fight with the moths will be continued.

### **RAPID TRANSIT**

#### **Rapid Installation of New Switch System**

Brooklyn, N. Y.—In record time and without unnecessary inconvenience to passenger traffic the track crews of the Brooklyn Rapid Transit lines on a Saturday night and Sunday tore out and replaced the complicated switching system in front of the Hall of Records in Brooklyn. The new set of switches and curves, used during the rush hours by more than five hundred trolley cars every sixty minutes, are laid in a substantial bed of concrete. With the exception of the cars that have been diverted to operate through Livingston street, every trolley line crossing the Brooklyn Bridge passes over the switches in front of the Hall of Records. It is said to be the busiest trolley point in the world. The work of installing the switches was completed at a cost of \$25,000.

#### **Trolley Patrons Protected from Insult**

Chester, Pa.—Officers of the newly organized Law and Order League are patrolling the streets to give protection against insult to persons riding on the trolley cars. Several arrests have been made, the first since the beginning of the strike for offences of this character. Many prominent citizens have contributed to the league.



### Raises Car Fares When Paid in Cash

Cleveland, Ohio.—With the announcement that a cash fare of five cents would be collected on all cars of the Municipal Traction Co., displacing the three-cent cash fare, Mayor Tom L. Johnson issued a long statement in which he defended the apparent abandonment of the three-cent charge. He pointed out that a passenger willing to spend 15 cents could purchase five of the company's aluminum discs, good for one fare each, and that the five-cent cash fare charge was not intended as a means of obtaining greater revenue, but as an inducement for patrons to buy the three-cent checks. Mayor Johnson declared the company had been losing more than \$1,000 a day through the inability of its conductors to collect fares thoroughly because of the loss of time in making change for passengers proffering coins other than three pennies. Mayor Johnson declared the change will be effective only until the lines are equipped with pay-as-you-enter cars. President Dupont has been repeatedly quoted as saying these cars cannot be ready for use over all lines for a year or more.

### State Commission Investigates Over-Crowding of Cars

Harrisburg, Pa.—The State Railroad Commissioner's men are studying the subject of over-crowding of street cars, especially on suburban lines, and it is possible that some steps may be taken in this direction before very long. It is said that it will take the form of a recommendation that trolley companies instruct their employes to adhere rigidly to a certain limit of passengers and that steps be taken to provide cars for carrying those who may exceed the maximum allowed to be carried. This matter is said to have come to the attention of the Commission in the investigation in the course of inquiry into some accidents which gave evidence that cars were being overloaded. Should it be found necessary to require that a maximum be fixed and followed it is possible that it may take the form of a general notice to companies and the presentation of a bill next winter.

### Visiting Philadelphia Councilmanic Committee Lectured

Milwaukee, Wis.—President Beggs, of the Milwaukee Railway and Electric Company, addressed the visiting Philadelphia Councilmen on the street railway problem. For a street railway to operate its cars at a lower average speed than nine miles an hour means bankruptcy, he said, and a speed of nine miles or more means dividends. The greater the speed the less the number of cars and employes necessary and many a street railway property is in a condition of bankruptcy solely because of failure on the part of its officials to recognize the economy of quick and efficient operation. Beggs bitterly denounced the ignorance of councilmen in most cities, and also the use of the big stick against corporations. He said that all street railway corporations must stand together to fight the anarchistic tendencies of recent and present times.

### New Haven Road May Build Subway

New York, N. Y.—Charles S. Mellen, president of the New York, New Haven & Hartford Railroad, at a public hearing by the Public Service Commission intimated that if his company was unable to come to an arrangement with the Interborough company for the carrying of passengers downtown by connections with either the existing subway or elevated lines, the New Haven would build a subway system of its own. When the old Rapid Transit Commission laid out the routes for a subway from the Bronx to the Battery either under Second or Third avenues, it was declared that an existing railroad company was prepared to construct the road with its own capital. Although no official announcement was made it was well understood that this corporation was the New Haven company. The plan was to run the New Haven trains through the subway from Mott Haven to the Battery with a station at Thirty-third street, where connection with the Pennsylvania railroad tunnel would be provided. Nothing more had been heard of the plan until now.

### MISCELLANEOUS

#### Municipal Opera House Prices

Berlin, Germany.—Plans for the great People's Opera House, where the highest grade productions are to be given at prices within the reach of everybody, have been made public. It is to cost \$4,000,000, half of which amount probably will be granted by Parliament, while the city of Berlin will appropriate the other half. In return, Berlin will receive a quid pro quo in the proprietorship of the present opera house. The new temple of music will be situated on the Potsdamerstrasse. The best seats will cost 87 1-2 cents and the cheapest 12 1-2 cents.

#### Public Hacks Inspected

Chattanooga, Tenn.—T. S. Wilcox, Chief Moseley and City Veterinary Sol Alexander conducted the monthly inspection of the public hacks at the police station. The Jehus passed in review and the horses, carriages and even the drivers were closely inspected. As a result of the inspection thirteen hacks and four horses were condemned by the officials and were forced out of service. Chief Moseley in speaking of the matter said that the monthly inspections have had the effect of improving the appearance of the hacks and horses to a great extent.

#### Smoke Ordinance Readily Complied With

Louisville, Ky.—City Smoke Inspector Thomas J. McCann states that he has not received a complaint from a single individual in protest against complying with the new ordinance compelling railroads, factories and the like to install smoke consumers. Local factory owners were given twelve months beginning last November to comply with the ordinance. Eighty smoke consumers of various kinds have been already installed and many more will be put in during the next month. The Illinois Central will put smoke consumers in all its engines within a few weeks. Smoke preventing devices cost from \$600 to \$1,200. In locomotives a jet of steam is used which costs about \$100 to install.

#### Would Follow Boston's Lead in Establishing Baths

Providence, R. I.—Enthused by their study of bathhouse facilities at Boston, the City Council committee having in charge the establishment of such facilities in this city returned from a trip to Boston. They visited various public baths in that city and at Brookline and as a result of their inspection and finding how the local conditions may be benefited by the application of some of the ideas followed out at the Hub, the committee will make a report to the Council and arrange to put in operation a public bathing project.

#### Savannah Council Condemns Convict System

Savannah, Ga.—The City Council has passed a resolution condemning the present system of leasing convicts by the State and called on the Legislature to do away with the system. A copy of the resolution is to be sent to the Governor and the members of the Legislature.

#### New Jersey Cities Rejecting Voting Machines

Trenton, N. J.—Under the Holcombe voting machine referendum law passed by the last Legislature sixty-six elections have already been held on the question of the retention or rejection of the machines. In sixty-five of the elections the vote was in favor of excluding the machines, so that in those election districts hereafter they cannot be used. One election district, that of Mannington Township, Salem County, voted to retain the mechanical voter. Between now and September 3 approximately 118 other elections upon this question are scheduled to take place. Under the law no election on the voting machines can be held within sixty days prior to any general election, so that September 3 is the last date this year for voting on the question, election day being November 3. The total number of voting machines in use in this State is 361. With sixty-six elections already held and others scheduled in 118 districts, only 177 machines are left in election districts wherein no petitions for an election have been filed.



## LEGAL NEWS

### A Summary and Notes of Recent Decisions—Rulings of Municipal Interest

#### STREET GRADE—PROPERTY RIGHTS

**City of Jackson vs. Williams et al.**—Under Constitution, providing that private property shall not be taken or damaged for public use, except upon due compensation being first made to the owner, a citizen may recover for damages caused him by the slightest invasion of his property rights for a public use, and hence may recover from a municipality for damages to abutting land caused by a change of grade in a street, whether occasioned by the initiation of the grade for the first time or by the altering of an established grade, including injury to shrubbery, fences, etc.—Supreme Court of Mississippi.

#### CLOSING ALLEY—DAMAGES

**Henderson et al. vs. City of Lexington.**—In proceedings to assess compensation for closing an alley, it appeared that, in connection with closing the alley, a viaduct was constructed immediately adjoining the alley closed, and that under the viaduct was a vacant space open to public use as a highway, which certain railroads were entitled to use for the purpose of business, but the public could not be excluded therefrom. Held, that an instruction authorizing the jury to take into consideration such open space was proper. The verdict of a jury assessing damages for closing an alley will not be reviewed where the damages are not so inadequate as to indicate that it was the result of passion or prejudice.—Court of Appeals of Kentucky.

#### TAKING LAND FOR STREET WIDENING

**Beckford vs. Town of Needham.**—The failure of town authorities to cause a description and plan of land taken to widen a street to be filed in the registry of deeds, as expressly required by Revised Laws 1902, within 60 days after the vote of the town accepting the relocation, does not render the taking of the land and widening of the street void; the statute being merely directory, and the construction to be given it not being affected by the fact that the Legislature has passed confirmatory acts in instances where a plan and description had not been filed.—Supreme Judicial Court of Massachusetts.

#### DEFECTIVE STREET—SUFFICIENCY OF NOTICE

**Purdy vs. City of New York.**—Under Laws 1886, providing for notice of intent to sue for personal injuries against a city, and providing that the notice shall state "the time and place at which the injuries were received," a notice of injuries to a pedestrian which states that the injuries were received on or about a designated date while walking along the sidewalk on a designated street in the city, by falling into "an opening, gully, or trench running across" the sidewalk, sufficiently states the place of the accident, though the designated street is over a mile in length, on it being shown that the place where the accident occurred was the only place where there was a gully or trench running across the sidewalk.—New York Supreme Court, Appellate Division.

#### ASSESSMENT FOR STREET SPRINKLING

**Corcoran et al. vs. Board of Aldermen of Cambridge et al.**—Revised laws, specifies the particulars in which the assessment thereunder for watering streets is to be like the annual tax upon property, and declares that it "shall be a part of the tax for that year on such estate." It is also provided that "the assessors shall make no abatement thereof except upon the recommendation of the board or officer by whom the list was certified to them." Held, that there is an assumed right, as in the case of other taxes upon property, to apply to the assessors for an abatement, whose right to grant it is limited by the requirement of a recommendation from the board or officer who certified the list on which the assessment was founded, and that an official duty is imposed on the board or officer to hear the landowner, pass upon his claim, including the validity and amount of the assessment, and make the recommendation if the tax was unwarranted or excessive, and hence the act is not unconstitutional as giving the property owner no opportunity to be heard in regard to the assessment, thus taking his property without due process of law. Revised laws, providing for the assessment of property by the front foot for the watering of streets, though not so providing in terms, contemplates that the assessments shall be founded on special benefits received by the property assessed, and that no assessment shall be made that exceeds the special benefit received. While full effect must be given in all ordinary cases to the legislative determination that an assessment

by the front foot, where the conditions are similar, is as nearly proportional and equal as is reasonably practicable, if it appears that an assessment made in that way will impose upon any property a liability substantially in excess of the special benefits conferred, the assessment cannot lawfully be made. In assessing the cost of watering city streets against abutting property, the value of the water furnished by the city from its aqueduct, maintained at its expense, might be included as a part of the cost.—Supreme Judicial Court of Massachusetts.

#### ASSESSMENT FOR STREET SPRINKLING

**City of Owensboro vs. Sweeney.**—The sprinkling of streets does not confer a special benefit on adjacent property in the sense of contributing to its value, and a special tax for such purpose cannot be sustained, and Act March 21, 1906, authorizing the Common Council of cities to provide for sprinkling the streets and to assess the cost thereof by front foot against the property abutting on the streets, is invalid.—Court of Appeals of Kentucky.

#### ASSESSMENTS—CITY'S LIABILITY

**City of Atchison vs. Friend.**—Where the city purchased several of the lots which had been assessed for the improvement to be used in connection with its fire department, and thereafter appropriated them to that public use, thus making it impossible to enforce the tax liens arising upon the special assessments and the special assessment bonds issued by the city, it became absolutely liable to the contractor for the amount of the assessment bonds.—Supreme Court of Kansas.

#### ANNEXED PROPERTY—TAXATION

**City of Gulfport vs. Todd.**—Under Annotated Code 1892, authorizing a municipality to levy taxes on the property within the corporate limits, "taxable according to the laws of the state," and providing that all taxable property acquired before the 1st day of February shall be assessed for the current year, etc., a city which, by ordinance adopted in April of a year, enlarges its corporate limits and thereby takes into the limits real estate, has no power to levy taxes on such real estate for the current year.—Supreme Court of Mississippi.

#### VEHICLE TAX

**Harder's Fireproof Storage & Van Co. vs. City of Chicago.**—The Legislature being authorized to permit a city to impose a license on vehicles using the city streets, and charge a fee therefor to be collected with a view to revenue only, the fact that the license fee required to be paid by an ordinance imposing such tax was to be set aside as a special fund, to be used in improving and repairing the streets of the city, did not render Hurd's revised statute, authorizing such tax, nor the ordinance imposing it, unconstitutional. That the owner of vehicles used on the public streets and highways paid an ad valorem tax on such vehicles as property did not exempt him from liability to pay a tax on the right or privilege of using such vehicles in his business.—Supreme Court of Illinois.

#### PRESUMPTION IN FAVOR OF ORDINANCE

**Pittsburg, C., C. & St. L. Ry. Co. vs. Hartford City.**—As an exercise of legislative power, pursuant to a proper delegation of authority, an ordinance of a city stands on the same general footing as an act of the Legislature. The determination by a legislative tribunal of open or debatable questions concerning what is expedient is not reviewable on questions of fact, if the question is one within the competency of the legislative tribunal to determine. In reviewing the act of a legislative body involving an exercise of police power, all reasonable presumptions must be indulged in its favor, and in determining its validity the court will treat the question as one of law; resort being had to extrinsic considerations only to the extent that the facts are or may become a matter of judicial knowledge.—Supreme Court of Indiana.

#### DISCHARGE OF EMPLOYEE

**Garvey vs. Lowell.**—Statute 1904, providing that no person holding office or employment in public service classified under the civil service rules shall be removed without his consent, except for just cause or reasons specifically given in writing, cannot be nullified by the board of health of a city; and a false recital in the record of the board of health of a city that such board discharged an employee in the spirit of economy is not conclusive as to the alleged motive, but evidence is admissible to show that the employee was discharged for other reasons in violation of the civil service law. The foreman of the yard of the health department of a city is not the holder of an office, his duties being those of one engaged in the labor service of the city.—Supreme Judicial Court of Massachusetts.

## MUNICIPAL APPLIANCES

### Rockwell Heaters

THE Rockwell Heater Company, 26 Cortlandt street, New York City, manufactures heaters, using oil as a fuel, for the purpose of applying heat anywhere that it is wanted. Instead of carrying the object to be heated to a fire, the fire is carried to it by a convenient device. The portable heater consists of a tank containing kerosene, an air pump, gauge glass and necessary valves. From the heater to the burner two lines of pipe are run, one for oil and one for compressed air. The heater is a large oil burner, the iron pipe connections serving as handles by means of which the operator may direct the flame where desired, standing sufficiently far away to avoid burning himself. The hand pump on the tank is used for charging the tank with oil from a barrel as well as for obtaining the air pressure of about

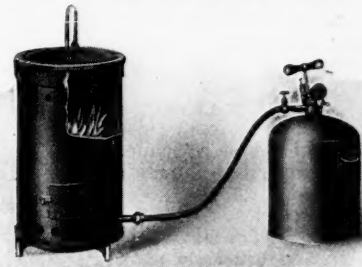


PORTABLE HEATER

twenty-five pounds. The oil consumption is two gallons an hour, and, as the air used is in proportion to the kerosene burned, pumping does not need to be done too frequently to interrupt the work. A second burner and lines of hose may be fitted to one tank, for use when it is permissible to heat both sides of a heavy object at one time. The length of hose supplied with a heater is ordinarily 12½ feet, but sections of greater length are furnished when desired. The size of the flame and intensity of the heat may be changed quickly to suit varying requirements by regulating the supply of air and oil. For use when compressed air is available, the non-portable type is recommended. An air pressure of 50 pounds will give best results where a high temperature is desired, such as is used in brazing, while 10 to 20 pounds is sufficient for skin-drying, where a soft sweeping flame is desired.

It is obvious that the uses of the burner in connection with municipal work are as varied as the uses of heat. It may be used as a surface heater in repairing bituminous pavements, either asphalt or bitulithic, when it is specially adapted for small patches, joints, and in working close to the curb, where perfect control is necessary in order not to injure the stone. Waterworks departments find the device of value in melting lead out of pipe joints. Heat can be applied to the exact spot where it is needed. The temperature of the oil flame is high enough to meet the lead without danger of burning the iron. By its use the difficulty of managing a fire is avoided, there is no danger of cracking the pipe and no lead will be lost. With a Rockwell Portable Heater equipped with two burners it is possible to take up 16-inch pipe at the rate of six joints per hour. A frequent use for the heater is the melting of lead holding the plates in the switches of street railroad tracks. The advantages of speed and convenience, as compared with a wood fire, are obvious. The Rockwell Company also manufacture a portable lead melting pot for supplying lead to pour joints. This is a self-contained device, being operated in the same manner as the portable oil heater used for melting lead out of pipe joints, and has a capacity of 300 pounds of lead per hour, or more, as desired. The tank is connected to the stand by a flexible hose, which may be disconnected for easy handling when being removed any distance or when the work is completed. The burner is fitted with large cleaning plugs which are easily accessible through a door opening in the casing. The large heating surface of the burner and the

arrangement of the jet insures a steady flow of gas at even pressure and is not affected by cold weather. The main feature lies in the fact that constant temperature is maintained, melting the metal rapidly without burning it, no matter how long it remains in the pot. Sheet iron pipe, where connections are



LEAD MELTING POT

made by riveting, often require heating on the lap for holding down when heavy material is used, and for this work the heater again demonstrates its usefulness. On large contract work a compressed air plant is generally installed for the operation of pneumatic hammers and portable oil rivet forges, and when compressed air is available the compressed air type of heater is preferable, as heats can be obtained more quickly, any desirable temperature being obtained by regulating air supply.

### Franklin Police Patrol

ALTHOUGH the H. H. Franklin Manufacturing Company has for some time past manufactured commercial vehicles which were wide in the range of work covered, the first police patrol has just been delivered, this being for the Police Department of Syracuse, N. Y. The patrol is built along the lines of the modern constructed police wagon and, by the nature of the Franklin construction, is extremely light, it weighing but 2,000 pounds. The motor is of the air-cooled type, 3¼x4, rated at 16 horsepower, with a maximum speed of 18 miles per hour. The worm-gear drive, which is a special feature of the Franklin commercial vehicles, is used and gives the most even torque possible to obtain, thus permitting a more steady speed on all classes of roads and grades under light or heavy loads. In place of the usual pneumatic tires, the wheels are fitted with solid rubber tires, eliminating all possible trouble from puncture. By a special auxiliary spring suspension, the vibration and shock which are natural with the use of solid tires are so distributed as not to affect the motor or the other construction and make the car extremely easy riding. In designing the body, care has been exercised to meet all the requirements of such a vehicle, it having a seating capacity of twelve and carrying a load of 2,000 pounds. The entire construction is well protected and inclosed with wire grill work and removable storm curtains. Seats are of special folding type, arranged with a view to simplicity, also ease in cleaning when required. Small electric lights are placed in a manner to give suitable illumination yet not brilliant enough to expose the occupant. The driver's seat, which is protected by an adjustable glass front and transom window top, is built on the extreme forward part of the car, forming a covering to the motor, giving satisfactory protection and also economizing room.



AUTO PATROL WAGON



## BOOK REVIEWS.

**The Smoke Nuisance—The Billboard Nuisance.**—Two pamphlets treating of these subjects have recently been issued by the Department of Nuisance of the American Civic Association, of which Harlan P. Kelsey, of Salem, Mass., is Vice-President. The former is intended to take the place of a pamphlet on the same subject issued in 1904, which was prepared by Frederick Law Olmsted, and which was so popular that a number of editions were called for. The object of the present pamphlet is stated to be that of promoting a tendency towards uniform legislation, and generally to create an intelligent public opinion on the smoke nuisance and to indicate measures of effective remedy. It contains Mr. Olmsted's original leaflet brought up to date, with reference to the recent statutes and ordinances, and also contains papers by Geo. W. Weldon, of the N. Y., N. H. & H. R. R., on "The Smoke Nuisance on Railroad Locomotives," and the larger part of one by Paul M. Chamberlain on "Boiler Room Economy." The pamphlet contains 32 pages, and is written in a popular and even entertaining style, while at the same time being by authorities which would serve as a guarantee of the accuracy of its statements.

The second pamphlet, "The Billboard Nuisance," is intended "to afford a summary of the arguments advanced against objectionable billboards, and to furnish suggestions as to the most available ways and means for the curtailment and elimination of the evil." Indebtedness is expressed to the editors and publishers of *The Outlook* and *The Craftsman* for permission to use so much of two articles appearing in their columns as presented a strong summing-up of the case against billboards. The main headings are, "The Indictment Against the Billboard," "The Celebrated San Jose Case," "Billboards and the Law," "Billboard Taxation and Regulation," "Billboard Miscellany," "The Press and Billboards," "Outdoor Advertising Abroad," and, finally, "How to Combat Billboard Abuses." The pamphlet contains 48 pages.

Copies of these may be obtained from the American Civic Association, North American Building, Philadelphia, Pa.

**Telephone Law. The Organization and Operation of Telephone Companies.** By A. H. McMillan, A.B., S.S.B. New York: McGraw Publishing Co., 1908. Cloth, 6x8½, 331 pages. Price, \$3.00.

The author, the legal editor of the *American Telephone Journal*, has written this book not so much for practising lawyers as for persons actually engaged in the telephone business. It places in compact form such legal information as will be of value to practical telephone men and to municipal authorities having such matters in charge. The first chapter concerns only those who are seeking to secure charters, and it advises them regarding the choice of the State in which to make application; advice is given as to what the charter should contain, the organization of the company, its code of by-laws and regulations, and the method of keeping the records of the corporation. Under the subject of franchises, the distinction is explained between federal, State and municipal franchises and the troubles that have arisen over conflicting claims. Coming to the question of municipal franchises, which are granted in ordinances, the author treats of the powers delegated to municipal corporations by the State. Technical questions regarding the method of granting the rights, duties and

liabilities imposed are discussed. The question of exclusive franchises is treated. A chapter is devoted to the matter of rights, rentals and charges. The questions of rights of way are treated and the distinction is brought out as to the title of abutting owners in streets and highways, as it varies in different States and cities. The facts as to whether telephone lines are additional burdens on the fee are discussed and references given to decisions in a number of cases. The right of eminent domain is taken up in connection with the charters of such companies as have been given the right to condemn land for their lines, and instances of disputes that have arisen with railroad companies are given. The rights of companies to locate poles, as they exist in various States, are explained. The questions of joint occupation of pole lines which are of increasing interest to the municipalities are briefly touched on. A chapter is devoted to the cutting and trimming of trees and the matter of damages for malicious injury. The different systems of taxing telephone companies are gone into in considerable detail. Questions of damages for personal injuries to both the employees and members of the public are discussed. An Appendix of 65 pages gives a number of blank forms used by telephone companies, the rules for their meetings, contracts for rights of way, licenses to build conduits, agreements for the joint use of poles, subscribers' contracts and other matters. Though written from the point of view of the corporation attorney, this work will prove of value to city authorities in aiding them to draw up telephone franchises or give them a better view of mutual rights where controversies occur.

## NEWS OF THE SOCIETIES

**Playground Association of America.**—The second annual congress of the Playground Association, to be held at the Museum of Natural History, New York City, from September 8 to 12, promises to be an event of more than ordinary importance.

The program is being worked out with great care. From present indications, the Congress will be an epitome of the best that has been done, thought or planned recently in connection with playgrounds.

The largest number of people will probably be attracted by the harvest festival on Saturday afternoon, September 12. This will be a great pageant of groups of workmen and women of all nationalities marching to the fields for the ingathering of the harvest. They will form on the green around booths or stacks of harvest products, pantomime in dances the part each has played in the ingathering, such as reaping, wine growing, dairying, fishing and lumbering, and present this harvest in a spirit of thanksgiving to the nation. Then will follow dances, each group expressing its joy in its own characteristic national dance. Finally, all will participate in a grand march.

## GROUPS

Italians—Fruit gatherers.  
Hungarians and French—Wine growers.  
Germans—Farmers.  
Dutch—Dairymen.  
Colored—Cotton and tobacco growers.  
Russians—Wheat.  
Slavs—Lumber and mining.  
Swedes—Fishermen.  
Kelts—Sheep and flax.  
Visits to playgrounds and exhibitions

in athletics, folk-dancing, etc., will be other outdoor features.

Among the speakers will be Gov. Charles E. Hughes, of New York; Dr. William H. Maxwell, Joseph Lee, George E. Johnson, Prof. C. W. Hetherington, Dr. Woods Hutchinson.

The discussion and reports by committees are to follow an exceedingly practical plan, and decisions of special value are sure to be reached. A few of these reports will deal with the following:

A normal course in play.  
Work in institutions.  
State laws.  
Equipment.  
Athletics for girls.  
Athletics for boys.

Perhaps the most fruitful session will be that of Friday, September 11. During the morning there will be three large conferences dealing with live questions.

There will be a conference of city officials from all over the United States, presided over by Mayor McClellan, of New York City. There will be a conference on games and play festivals by country children, in which the county superintendents of schools and others will participate. There will, in all probability, be a conference of playground supervisors from many cities.

In addition, biograph and lantern pictures of playground activities will be shown, and an exhibit of playground material will be held.

Mayor George B. McClellan is the honorary president, and Dr. Luther H. Gulick, the president. The list of vice-presidents is composed of many eminent persons from all parts of the country, who are interested in the work.

The purpose of this congress, which will be attended by leading men and women of every city in the country, is to give to educators, philanthropists, municipal authorities and others interested in the welfare of children an opportunity to consult on ways and means for introducing and increasing playgrounds in their respective localities.

The final printed program and the volume of proceedings will be of lasting value to the movement.

**Connecticut Society of Civil Engineers.**—The summer meeting of the society was held at Lake Compounce Wednesday, August 12. Compounce is one of the prettiest scenic spots of the State, and is accessible by trolley. Its facilities for boating and bathing were greatly enjoyed. A ball game and boat race were interesting features of the meeting. A trip was made to inspect the sewage filtration beds of the city of Bristol.

**National Association of Comptrollers and Accounting Officers.**—The third annual convention of the National Association of Comptrollers and Accounting Officers will be held at the Seelbach Hotel, in the city of Louisville, Ky., on September 22, 23 and 24, 1908. The members of the association are deeply interested in the study of the many and complex problems of municipal finance, and are striving to so improve the accounting systems of their cities and States that they may present to the public a clear and comprehensive statement of the cost of every branch of the municipal government. A program is now being prepared for the Louisville meeting, covering the many interesting subjects of municipal finance, in which will be set forth the progress being made throughout the country in this branch of the public service. All persons actively interested in the subject are cordially invited to be present, and participate in the discussions at the meeting.



**Merchants' Association of San Francisco.**—The association is considering the matter of providing independent inspection of all parts of the work to be done out of the proceeds of the recently voted bond issue. The vigilance it has exercised over street paving and sewer contracts done under the bond issue of 1903 has met with general approval of intelligent taxpayers, and many of the directors of the association feel that it would be a valuable public service to continue the work.

### Calendar of Meetings

August 10-12.

**International Acetylene Association.**—Eleventh Annual Meeting, Chicago, Ill.—A. Cressy Morrison, Secretary.

August 11-14.

**American Association of Park Superintendents.**—Annual meeting Minneapolis, Minn.—F. L. Mulford, Secretary, Harrisburg, Pa.

August 25-27.

**Ohio Electric Light Association.**—Fourteenth annual convention, Put-in-Bay Island, O.

August 25-27.

**League of Cities of the Third Class of Pennsylvania.**—Annual convention, Altoona, Pa.—Thomas H. Grevy, Chairman Committee on Entertainment, Altoona.

August 25-28.

**International Association of Fire Engineers.**—Annual convention, Columbus, O.—James McFall, Secretary, Roanoke, Va.

September 8-12.

**Playground Association of America.**—Second annual congress, New York City.—Dr. Luther Halsey Gulick, President, 624 Madison avenue, New York City.

September 15-17.

**Central Water Works Association.**—Twelfth Annual Convention, Pittsburg, Pa.

September 17-20.

**League of Iowa Municipalities.**—Ottumwa, Ia.

September 21-October 12.

**National Association for the Study and Prevention of Tuberculosis.**—International Congress, Washington, D. C.—Dr. Henry Barton Jacobs, Secretary, Baltimore, Md.—Dr. Joseph Walsh, Philadelphia, Pa. Special Secretary of the Committee on the International Congress.

September 22-24.

**National Association of Comptrollers and Accounting Officers.**—Third annual convention, Seelbach Hotel, Louisville, Ky.—Howard C. Beck, Secretary, 61 McGraw Building, Detroit, Mich.

September 23-25.

**New England Water Works Association.**—Annual convention, Atlantic City, N. J.—Willard Kent, Secretary, Narragansett Pier, R. I.

September 30-October 2.

**League of American Municipalities.**—Twelfth annual convention, Omaha, Neb.—John MacVicar, Secretary, Des Moines, Ia.

September 29-30.

**American Public Works Association.**—Annual meeting, Asheville, N. C.

September.

**New Jersey State Firemen's Association.**—Annual meeting, Atlantic City, N. J.—William Exall, Secretary, 11 Howard street, Newark, N. J.

October 5-6.

**Illuminating Engineering Society.**—Second Annual Session, Hotel Walton, Philadelphia, Pa.

October 11.

**International Roads Congress.**—First convention, Paris, France.—President Lethier, l'Inspecteur General des Ponts et Chaussées.

October 12-17.

**American Street and Interurban Railway Association.**—Twenty-seventh annual meeting, Atlantic City, N. J.

October 20-23.

**American Society of Municipal Improvements.**—Fifteenth annual convention, Hotel Dennis, Atlantic City, N. J.—A. Prescott Folwell, Secretary, 239 West Thirty-ninth street, New York City.

October 20-23.

**National Municipal League.**—Annual meeting, Pittsburg, Pa.—Clinton Rogers Woodruff, Secretary, 705 North American Building, Philadelphia, Pa.

November 17-20.

**American Civic Association.**—Annual Meeting, Pittsburg, Pa.—Clinton Rogers Woodruff, Secretary, 705 North American Building, Philadelphia, Pa.

December 4-5.

**New Jersey State Sanitary Association.**—Annual Meeting, Lakewood, N. J.—John B. Smith, Chairman, New Brunswick, N. J.

### TRADE NOTES

**Cast-iron Pipe.**—Chicago. Little tonnage has been entered during the past week outside of routine business. Quotations: 4-inch, \$27; 6 to 12-inch, \$26; 16-inch and up, \$25. Birmingham. Market inactive but no curtailment of production is in sight. Quotations: 4 to 6-inch, \$23; 8 to 12-inch, \$23; 8 to 12-inch, \$22; over 12-inch, average \$21. New York. Quite a number of small lettings are coming up. Quotations: 6-inch, \$23.50 to \$24.50, in carload lots at tidewater.

**Pig Lead.**—Prices are firm, but unchanged, at 4.60c., New York, and 4.45c. to 4.50c., St. Louis. The advance a week or two ago by the leading producer gave a better tone to the market. It is commented on in the metal trade that the lead situation has been skilfully handled, for since the low price of 3.50c., in December, last, the advance, although slow and steady, has been continuous, without any setback. The advance has also been carefully timed, so that prices have never gone above the London market with the duty added. Markets such as this apparently give buyers more confidence.

**Power Company.**—A Bondholders' Protective Committee, of the Hudson River Electric Power Company, has been formed at the request of the holders of bonds who are not satisfied to accept the proposition recently made by the company to forego their interest for a period of four years, and to accept the notes of the company, which are to be secured by the bondholders' own coupons. The bondholders' feeling is that from the company's statement the situation is such that a committee wholly separate from the present management of the company, having the bondholders' interest alone to conserve, should be appointed to protect their rights.

**New Firm.**—F. G. Clapp, 610 Fitzsimons Building, Pittsburg, Pa., announces that he has resigned from the United States Geological Survey, with which he has been connected for the past seven years, and has formed a partnership with Mr. A. W. Bee, Jr., civil engineer, under the name of Clapp & Bee, for the purpose of engaging in the expert practice of geology and allied branches of engineering, specializing in reports on coal, oil and gas properties, all kinds of surveying, mapping and drafting, prospecting for minerals, and expert work regarding wells, ground waters, and public water supplies.

**Public Utility Company.**—A public utility corporation to supply power to a score or more of cities and towns in northern Indiana and Ohio has been formed with a capital stock of \$4,500,000. The directors, most of whom are well known in the gas and electrical world, are: Franklin L. Babcock, Anthony N. Brady, Charles F. Dietrich, Frank S. Hastings, of New York; James P. Lee, Samuel T. Murdock, Henry C. Paul, Albert Tag, and James N. Wallace.

Light, heat and power are to be supplied by means of artificial and natural gas, electricity, steam and hot water, and to that end the company is authorized to manufacture, produce, procure, transport, distribute and sell its products; also to purchase, lease or otherwise acquire natural gas territory, gas wells, gas works, power plants, etc. The capital stock is divided into 45,000 shares of \$100 each. The home of the new company will be at Lafayette, Ind.

### PERSONALS

**BAXTER, WM. C.**, Watervliet, N. Y., will be the republican candidate for Mayor this fall. At present he is City Coroner.

**BEAUDROW, WM. G.**, Holyoke, Mass., an ex-Alderman, has been elected to fill the vacancy on the Board of Assessors caused by the resignation of Joseph St. Martin.

**BURR, F. P.**, Middletown, Conn., has resigned the position of Superintendent of the Water Board.

**BYRNES, THOMAS**, Rome, N. Y., ex-Chief of Police, died August 7.

**CANADAY, C. E.**, New Castle, Ind., City Health Officer, has resigned.

**GEUGAN, THOMAS J.**, Boston, Mass., member of the Boston Transit Commission, died, July 31, in Europe, where he was seeking health.

**GODEFFRONY, RICHARD**, Civil Engineer, Paterson, N. J., has been elected Major of the Phelps Guards.

**HIBBARD, GEORGE A.**, Mayor of Boston, Mass., has returned from his summer home at Provincetown, Mass.

**HALL, JAMES** and **DOUGLASS DEWAR**, of New York City, expert accountants, have been appointed by Mayor Whitlock of Toledo, O., to examine accounts in the Water Works Department. Messrs. Hull and Dewar, who are with the firm of Maurich, Mitchell & Co., 79 Wall street, New York, have performed service for the National Civic Federation, worked on the accounts of the old Chicago Street Car Co., the Chicago Gas Co., the Consolidated Gas Co. of New York, the Cleveland Water Works and have recently designed a new system of municipal accounting for Springfield, O.

**HINCKLEY, S. H.**, Mobile, Ala., has resigned his position of Chief Engineer of the water works.

**MCDONALD, J. H.**, Omaha, Neb., contractor, is now visiting London, England, for the purpose of studying modern block pavements. He announces his intention of introducing a new system in America on his return.

**MCENERY, W. H.**, Bessemer, Ala., has resigned his position of City Engineer.

**MORRILL, W. N.**, Constructing Engineer of the Sewer Commission, Louisville, Ky., has resigned to resume his former business of consulting engineer at St. Louis, Mo.

**MOYER, LEWIS C.**, Reading, Pa., former Chief of the Fire Department, died August 1. Mr. Moyer was one of the oldest members of the Rainbow Fire Company, and was president of that organization for five years. He was elected Chief of the Reading Fire Department in 1871, and served one term. The first big fire at which he served as Chief was the Stichter hardware store, at Fifth and Penn streets. He was also a member of the Neversink and Friendship Fire Companies.

**RANDOLPH, ISHAM**, Chicago, Ill., formerly Chief Engineer of the Chicago drainage canal, has been retained by the city of Baltimore as consulting engineer in the preparation of plans for abolishing the grade crossings of the Baltimore and Ohio R. R.

**VAUGHN, C. G.**, Natchez, Miss., Consulting Engineer of the city, died August 4. He was a member of the American Society of Civil Engineers.

**WARD, WILLIAM**, City Clerk, Rochester, N. Y., has had his Secretary John J. Kenney, placed in the exempt class of the Civil Service.

**WEED, HOWARD EVARTS**, Chicago, Ill., has prepared plans for landscape gardening in connection with a park and tree school playgrounds in Gas City, Ind.

**WHITE, MICHAEL J.**, Mayor of Dover, N. H., will be married, August 16, to Miss Joanna Leary, of Dover.

## THE WEEK'S CONTRACT NEWS

Relating to Municipal and Public Work—Street Improvements—Paving, Road Making, Cleaning and Sprinkling—Sewerage Water Supply and Public Lighting—Fire Equipment and Supplies—Buildings, Bridges and Street Railways—Sanitation, Garbage and Waste Disposal—Police, Parks and Miscellaneous—Proposals and Awards

To be of value this matter must be printed in the number immediately following its receipt, which makes it impossible for us to verify it all. Our sources of information are believed to be reliable, but we can not guarantee the correctness of all items. Parties in charge of proposed work are requested to send us information concerning it as early as possible; also corrections of any errors discovered.

### BIDS ASKED FOR

STATE	CITY	RECEIVED UNTIL	NATURE OF WORK	ADDRESS INQUIRIES TO
<b>Street Improvements</b>				
Missouri	Kansas City	August 20, 11 A.M.	Grading portions of twenty streets	J. L. Darnell, City Engineer.
Ohio	Utica	August 20, noon	Brick paving, 15,000 sq. yds.; curb and gutter, 10,000 lin. ft., Main Street	H. L. Maddock, Newark, Engineer. W. H. Gillespie, Mayor.
Pennsylvania	Pittston	August 20	Constructing brick paving on William and Church Streets	B. E. Briggs, City Engineer.
Pennsylvania	Erie	August 20	Paving 5 streets	
New Jersey	Newark	August 20	4,600 sq. yds. wood block pavement on concrete foundation; 3,000 ft. of 16 x 5-in. curb	Morris R. Sherrerd, Ch. Eng. Bd. of Street and Water Commissioners. Edward A. Linehan, City Recorder. Fred Giraud.
Iowa	Dubuque	August 20	6,200 sq. yds. macadamizing	T. W. Jaycox, State Engineer.
Texas	San Antonio	August 20	Laying vitrified brick and asphalt paving	C. W. Mercer, Village Clerk.
Colorado	Denver	August 21, noon	Constructing wagon road, 4,000 lin. ft. and 20 ft. log span bridge	C. E. Troy, Village Clerk.
Ohio	Dillonvale	August 21, noon	Paving Smithfield St. with fire brick or block	James N. Riley, Sec'y Bd. of C. & S.
Ohio	Lockland	August 21	Macadamizing, etc., Wayne and Steuart Aves. and W. Ferrer St.	A. J. O'Reilly, Pres. Bd. Pub. Wks.
New York	Troy	August 21	Grading and regulating Ave. B. and culvert	Col. John G. D. Knight, Army Bldg., N. Y.
Missouri	St. Louis	August 21	Laying asphalt paving on Blackstone and Eastern Avenues	
New York	New York	August 22, noon	Paving stone for repairing dike in Hudson River	
Dist. of Col'bia	Washington	August 22	Paving roadway of Anacostia bridge and another roadway bridge with sheet asphalt	Commissioners, District of Col'bia.
Indiana	Terre Haute	August 22	Constructing 7,920 ft. of rock road	G. N. Wallace, County Auditor.
Florida	Ft. Barrancas	August 24, 11 A.M.	Bldg. and repairing macadam roads at post	Capt. D. W. Hand, Q. M.
Ohio	Lowellville	August 24	Bldg. artificial sidewalks and macadamizing Walnut St.	Clerk of Council.
New York	Fulton	August 24	Curbing and paving two streets	W. A. Harrison, City Clerk.
New York	Glens Falls	August 24	6,352 sq. yds. sheet asphalt on concrete foundation	W. G. Potter, City Clerk.
New York	New York	August 25, 11 A.M.	Regulating, grading and paving several streets in the Bronx	Louis F. Haffen, Pres. of Borough.
Ohio	Upper Sandusky	August 25, noon	Grading and stoning various roads	J. N. Traxler, County Auditor.
Nebraska	Norfolk	August 25, 6 P.M.	Laying 6 blocks vit. block pavement	Ed. Harter, City Clerk.
Ohio	Defiance	August 25	Paving Clinton St. vit. brick on concrete; cost, \$17,500	T. P. Cantlon, City Clerk.
New Hampshire	Concord	August 25	Grading and surfacing with gravel and trap rock, two roads	A. W. Dean, State Engineer.
Ohio	Cleveland	August 26, 11 A.M.	Grading, etc., portion of Center road in Warrensville twp.	A. B. Lea, County Engineer.
New Jersey	Westfield	August 27, 8:15 P.M.	Vit. brick on 6-in. concrete, etc., Broad St. & Westfield Ave.	Lloyd Thompson, Town Clerk.
Ohio	Cincinnati	August 28, noon	Improving Duck Creek road from city line to Dearfield road	Stanley Struble, Pres. Co. Com'rs.
Ohio	Columbus	August 28	Permanent roadway on Central College bridge	John Scott, Clk. Bd. of Co. Com.
Indiana	Williamsport	August 29, 3 P.M.	Constructing 12,000 feet of gravel road in Kent Township	R. L. Winks, County Auditor.
Indiana	Anderson	August 29	Grading, graveling or macadamizing 21,098 feet of highway	M. J. Brown, Chm. Bd. of Co. Comrs.
New York	Mineola, L. I.	August 31, 10 A.M.	Gen. improvement, Flower Hill Ave., Port Washington	Wm. H. Luyster, Clk. Bd. Sup'rs.
New York	Fort Edward	August 31, 8 P.M.	Paving portions on Broadway and East St. with brick, asphalt or other material	Board of Trustees. McClellan Dodge, City Engineer.
Wisconsin	Appleton	August 31	Paving Lake St.	
New York	Port Washington	August 31	5,600 sq. yds. macadam, 6,400 lin. ft. concrete curb and gutter, 2,015 lin. ft. concrete curb and brick gutter, 2,800 sq. ft. sidewalk	Wm. E. Luyster, Clk. Bd. of Co. Supervisors.
New York	Johnstown	August 31	11,164 sq. yds. Clearfield brick pavement, 4,826 lin. ft. stone curb, radius curb, etc. (all bids received Aug. 3rd rejected)	Frank Bogaskie, City Clerk.
Ohio	Defiance	September 1, noon	Paving certain streets with brick on concrete base	M. J. Wals, Clk. Bd. Pub. Service.
New Jersey	Jamesburg	September 2, 10 A.M.	Constructing macadam road in the grounds of the State House	Board of Trustees.
Georgia	Dublin	September 3, 8 P.M.	Laying 17,000 sq. yds. of vitrified brick; one block bit. paving	Mayor.
Ohio	Cincinnati	September 4	Repairing two roads	Fred Dreihls, Clk. Bd. Co. Com'rs.
Wyoming	Fort McKenzie	September 5, 10 A.M.	Constructing macadam roads, curbs, drains and gutter	Lieut. L. E. Hohl, Const. Q. M.
Wisconsin	Fond-du-Lac	September 5, 3 P.M.	Constructing cement pavement	E. P. Fitzgerald, Chm. of Pub. Wks.
Indiana	Terre Haute	September 5	Macadamizing the McClintock Road	N. G. Wallace, County Auditor.
Indiana	Danville	September 7, 10 A.M.	Constructing 11,000 ft. of gravel road in Washington Twp.	W. H. Nichols, County Auditor.
Indiana	Liberty	September 7, 2 P.M.	Constructing gravel road in Union Township	Clinton Gardener, County Auditor.
Minnesota	Mankato	September 7, 2 P.M.	Constructing Rapidan Mills Hill Road	County Auditor.
Iowa	Osceola	September 7	6,500 sq. ft. cement sidewalk	W. N. Temple, City Clerk.
Indiana	Vincennes	September 8, 2 P.M.	Constructing 4,972 feet gravel road in Vincennes Twp., 104,602 ft. in Decker Twp., 5,065 ft. in Washington Twp.	John T. Scott, County Auditor.
Indiana	Muncie	September 9	Constructing gravel, crushed stone and brick roads	Joseph E. Davis, County Auditor.
Illinois	Waukegan	September 11, 8 P.M.	Paving 1 mile of Marion St. with brick	W. S. Bullock, Pres. Bd. Local Imps.
<b>Water Supply</b>				
Illinois	Oak Park	August 20, 4 P.M.	Construction of 16-inch cast-iron water main	R. A. Carpenter, Com. of Pub. Wks.
Wisconsin	De Pere	August 20, 7 P.M.	Furnishing and laying 1,350 ft. cast-iron water pipe with specials	W. R. Matthews, Sec'y Bd. of Water Commissioners.
Iowa	Hospers	August 20, 8 P.M.	Furn. material and constructing water works	Jos. Klein, Town Clerk.
Texas	Galveston	August 20	Furnishing 25 tons 8-inch c. i. water pipe	John D. Kelly, City Secretary.
Illinois	E. Moline	August 20	Furnishing and laying about 3 1-2 miles of 12, 10, 8 and 6-inch mains	G. F. Johnston, Pres. Bd. of Local Improvement.
Ohio	Rockport	August 21, 2 P.M.	Furnishing and laying pipes in Midland and Lakota Avenues	Wm. Dahm, Clerk.
North Dakota	Grand Forks	August 21	Constructing mains in several streets	W. H. Alexander, City Auditor.
South Dakota	Murdo	August 22	Constructing water works plant, costing about \$10,000	C. J. Tergen, Chm. Town Board.
Indiana	Rockville	August 24, 2 P.M.	Bldg. water works, inc. brick pump station, 2 vertical boilers, 2 horizontal duplex pumps, 170 gals. min. each; 2 1-2 miles 6- or 8-in. c. i. pipe	Dabney H. Maury, C. E., Peoria, Ill.
Mississippi	Clarksdale	August 24	Bldg. 250,000-gal. reservoir, rein. concrete or brick chimney, 300 k.w. generator, dir. con. to 4-valve or Corliss engine	W. G. Kirkpatrick, Jackson, C. E.
Ohio	Columbus	August 24	Furnishing grates, automatic stokers and water tube boilers	E. W. Hirsch, Sec'y Bd. Pub. Serv.
Ohio	Toledo	August 25, noon	Bldg. Sections 1, 3 and 4, filtered water conduit, Contracts 2, 3 and 8, conduit of brick or concrete 6 ft. diam., 11,098 ft. long	Reynold Voit, Sec'y Bd. Pub. Serv.
Ontario	Toronto	August 25, noon	Constructing 16-20-in. c. i. water mains	Joseph Oliver, Mayor.
New York	Peekskill	August 25, 8 P.M.	Bldg. water filters, reservoir, etc., inc. 13,500 cu. yds. exc., 4,500 cu. yds. concrete, 4,700 cu. yds. filter sand, 1,100 cu. yds. filter gravel, pipes and appurtenances	Hazen & Whipple, N. Y. City, C. E.
Indiana	Warsaw	August 25	Bldg. steel water tank and tower with foundation	John C. Beagle, County Auditor.
Nebraska	Pilger	August 25	Constructing water works; estimated cost, \$10,000	C. A. Tinney, Village Clerk.
Indiana	Rockville	August 26	Constructing pumping station and plant; also 2 1/2 miles 6 and 8-inch c. i. pipe	Dick H. Ott, Pres. Bd. of Trustees.
New York	New York	August 26, 2 P.M.	Furnishing and delivering c. i. pipe and special castings	John H. O'Brien, Com'rs W. Supply.
Kansas	Cottonwood Falls	August 26, 5 P.M.	Constructing complete water works system	R. O. Miner, Mayor.
Michigan	Owosso	August 26	Furnishing two Scotch marine boilers, 200 H.P.	Bd. of Public Works.
Texas	Galveston	August 27	Furnishing and constructing c. i. water main across ship canal	John D. Kelly, City Secretary.
Minnesota	Brainerd	August 27	Constructing dam and hydro-electric plant, power pumping plant, c. i. pipe hydrants, valves, etc.	H. J. Spencer, City Clerk.
Florida	Ft. Barrancas	August 29, 11 A.M.	Bldg. or reblgd. steel trestle and bldg. steel water tank	Capt. D. W. Hand, Q. M., U. S. A.
Connecticut	Wallingford	August 31, 8 P.M.	Laying water mains	Board Water Commissioners.
Oregon	Portland	August 31, 11 A.M.	Excavating and constructing concrete and masonry work for the Dalles-Clio-Canal	Maj. J. F. McIndoe, U. S. A.
New York	New York	September 1, 11 A.M.	Constructing 3 miles of plain concrete conduit, 17 ft. high and 17 1/2 ft. in width inside; \$225,000 bond	John H. O'Brien, Com'r W.S., G. & E.



## Water Supply—Continued

Illinois.....	Winnetka.....	September 1, 8 P.M.	Furn. material, etc., and bldg. mech. filter plant, inc. filters, 1,000,000 gals. coagulation basins, clear water reservoir and housing plant; rein. concrete required where practicable.....	W. B. McIlvaine, Village Pres. W. H. Austin, Town Clerk.
Alabama.....	Russellville.....	September 1.....	Constructing water and light plant.....	
Utah.....	Marysville.....	September 1.....	Constructing reservoir, involving 230,000 cubic yards of earth work.....	State Bd. of Land Com'rs, Salt L. Cy.
South Dakota.....	Platte.....	September 2.....	Furnishing and erecting steel water tower with tank and 11,424 ft. 4, 6 and 8-in. mains.....	W. F. Vander Vort, City Aud. Lieut. W. E. Holliday, Const. Q. M. B. H. Tellman, City Recorder. E. Lockridge, Chief Engineer. Morenci Water Co.
Georgia.....	Ft. McPherson.....	September 4, 11 A.M.	Sinking one or two 8-inch tubular deep wells.....	W. M. Madden, Clk. Water Board. W. McQueen, City Clerk.
Michigan.....	Muskegon.....	September 8.....	Furnishing 6 million gallon pump.....	
Massachusetts.....	Springfield.....	September 9, 2 P.M.	Furnishing and laying about 12 miles of 42-inch pipe.....	
Arizona.....	Morenci.....	September 16, 9 A.M.	Laying 25,000 feet 10-in. wrought steel pipe.....	
Indiana.....	Evansville.....	September 24, 7 P.M.	Constructing municipal filter plant; cost, \$225,000.....	
Brit. Columbia.....	Vancouver.....	October 14, 4 P.M.	Supplying c. i. pipes, steel pipes, and Ludlow Water Hydrants.....	

## Sewerage

Pennsylvania.....	Forest City.....	August 20, 6 P.M.	Bldg., inc. 18,560 ft. 6 to 18-in. t. c. pipe, 20 manholes, 17 lamp-holes, sanitary sewers; F. J. Howell & Co., Engineers.....	S. J. Jennings, Burgess. Geo. Holmes, Clk. Bd. Pub. Service. C. W. Thorpe, City Engineer. G. B. Roessing, Borough Clerk.
Ohio.....	Salem.....	August 20.....	Constructing sewer in Washington, Evans and E. Fourth Sts.....	
Montana.....	Bozeman.....	August 20.....	Constructing public sewer No. 2.....	
Pennsylvania.....	Cheswick.....	August 20.....	One mile of 6 to 10-in. sewers.....	
Kentucky.....	Louisville.....	August 21, noon.....	Bldg. Sec. D, southern outfall sewer, Contract No. 11, rein. concrete sewer: 770 ft. of 13 ft. 9 in., 2,763 ft. of 13 ft. 6 in., 1,037 ft. 13 ft. 3 in., 1,368 ft. 13 ft. sewer; depth of cut, 26 to 42 ft.; 11,000 cu. yds. concrete masonry; 660,000 lbs. rein. steel.....	J. B. F. Breed, Ch. Eng'r Sew. Comrs. John C. Abbott, Mayor. M. C. Morgan, City Auditor. A. W. Jeffries, City Auditor. W. A. Harrison, City Clerk.
New Jersey.....	Fort Lee.....	August 21, 8 P.M.	Constructing portion of the Dead Brook sewer.....	
North Dakota.....	Fargo.....	August 24, 5 P.M.	Constructing 12-in. lateral sewer in Tenth St.....	
South Dakota.....	Mellette.....	August 24, 8 P.M.	Constructing sewer system.....	
New York.....	Fulton.....	August 24.....	Storm sewer in Third St.....	
Minnesota.....	Waukegan.....	August 25, 8 P.M.	Building reinforced concrete septic tank complete; also 1,905 lin. ft. 12-in., 500 ft. 10-in., 1,865 ft. 8-in. sewer pipe, with 15 manholes.....	John Madigan, City Clerk. City Clerk. Stillwater H. Townsend, City Eng'r.
Iowa.....	Sioux City.....	August 25.....	Sewers in several streets.....	
New Jersey.....	Cape May.....	August 25.....	Part of sewerage system.....	
Wisconsin.....	Plymouth.....	August 25.....	Bldg. section of sewer system and disposal plant, inc. 5,161 ft. 6 to 15-in. pipe, 16 manholes, etc.; separate bid on disposal plant.....	C. W. Jackson, City Clerk. Capt. Wm. D. Davis, Const. Q. M. John M. Quion, City Clerk. J. F. Cooper, City Clerk. Herman Berndt, Mayor. John S. Kemp, Street Commissioner. Clerk Borough Council. Village Clerk. J. W. Turner, Village Eng'r. Sewer and Water Board. Constructing Q. M. City Clerk.
Kansas.....	Ft. Leavenworth.....	August 27, 11 A.M.	Constructing storm water and subsoil drain.....	
New York.....	Seneca Falls.....	August 27, 4 P.M.	Constructing septic tank and appurtenances.....	
Minnesota.....	Sauk Center.....	August 28, 9 A.M.	Constructing a district sewer.....	
Colorado.....	Durango.....	August 28, 9 P.M.	Bldg. 12 sanitary sewers, with spurs, branches, etc., Dist. 2.....	
New Jersey.....	New Brunswick.....	August 31, 8 P.M.	Laying 2,000 ft. 15-in., 3,000 ft. 10-in. sewer pipe.....	
Pennsylvania.....	Wilkes-Barre.....	August 31.....	Constructing sewer in Union St.....	
Ohio.....	Frazersburg.....	August 31.....	Constructing drainage sewer 2,125 ft. long of 18-inch clay pipe.....	
Ohio.....	Jackson.....	September 1, 1 P.M.	Constructing 1.4 miles sanitary sewer; cost \$10,000.....	
Louisiana.....	New Orleans.....	September 1.....	Furnishing sewer pipe, brick, cement, etc.....	
Texas.....	Ft. Sam Houston.....	September 3.....	Constructing sewer and drainage system in new addition.....	
New Jersey.....	Point Pleasant.....	September 3.....	Constructing 4 miles of 6 to 12-in. vitrified sewer.....	
Mississippi.....	Vicksburg.....	September 7, 8 P.M.	Furn. material and laying system of house sewers, inc. 30 miles 8 to 27-in. pipe or concrete sewers, 400 manholes, 100 flush tanks; W. G. Kirkpatrick, C. E. Jackson, Engineer.....	Board of Aldermen. C. Linkroum, Pres. Imp. Com'n.
New Jersey.....	Hackensack.....	September 8.....	Constructing sewer.....	
Dist. of Col'bia.....	Washington.....	September 14, noon.....	Furnishing two vertical compound engines at the sewerage pumping station.....	Com'rs District of Columbia. I. J. Levinson, Sec'y Bd. of Loc. Imp. International Bureau of Am. R'e publics, 2 Jackson Place, Wash't'n.
Illinois.....	Peoria.....	September 15.....	Constructing sewer; estimated cost, \$230,000.....	
Ecuador.....	Guayaquil.....	December 1.....	Constructing sewerage system.....	

## Public Buildings

Virginia.....	Accomac.....	August 20, noon.....	Erecting jail bldg.; F. P. Milburn & Co., Wash., D. C., Archts.....	W. N. Nock, Chm. Co. Supervisors. Wm. L. Benson, County Auditor.
Indiana.....	Kokomo.....	August 20, 2 P.M.	Building orphan's home for County.....	Henry Smith, Pres. Park Board. James Knox Taylor, Wash., D. C. W. M. Crosier, Sec'y School Board. Chairman of Committee.
New York.....	New York.....	August 20, 2 P.M.	Laying tile floor in basement of Metropolitan Museum of Art.....	Henry Smith, Pres. Park Board. County Commissioners.
Pennsylvania.....	Pittsburg.....	August 20, 3 P.M.	Constructing, complete, U. S. Marine Hospital.....	J. H. Owings, Sec'y Bd. Education S. F. Mason, Chm. Bd. Educ. Board of Local Improvement. Schuler Bros., Architects. E. S. Cameron, Auditor. R. P. Irving, Auditor. School Board. E. M. Atterberry, County Auditor. Supt. of Public Service. Robt. W. Hebbard, Com'r Pub. Char. James Knox Taylor, Wash., D. C. Spencer Roberts, Architect.
Iowa.....	Coggon.....	August 20, 7 P.M.	Bldg. school house in Jackson Township.....	Dept. Pub. Wks. J. L. Brands, Chm. Quarter Master.
Georgia.....	Americus.....	August 20.....	Bldg. Carnegie Library, \$20,000.....	
New York.....	New York.....	August 20.....	Bldg. approaches to New York Public Library.....	
Kentucky.....	Calhoun.....	August 20.....	Bldg. new court house; Harris & Shopbell, Evansville, Ind.....	
Mississippi.....	Natchez.....	August 20.....	Complete plans for 2-story and base, brick school; cost, \$25,000.....	
New Jersey.....	Keyport.....	August 20.....	Bldg. 66 x 50 ft. brick school, concrete floor; H. A. Young, Archt.....	
Missouri.....	St. Louis.....	August 21.....	Bldg. bath-house and swimming pool.....	
North Dakota.....	Wahpeton.....	August 22, noon.....	Bldg. \$30,000 jail and Sheriff's residence, press brick, stone, etc.....	
North Dakota.....	Wahpeton.....	August 22, noon.....	Installing plumbing and heating for County Poor Farm.....	
North Dakota.....	Forman.....	August 22, 2 P.M.	Bldg. cement walk, side of court house.....	
Oregon.....	North Beach.....	August 22.....	Bldg. brick high school.....	
North Dakota.....	Williston.....	August 24, 10 A.M.	Installing steam heating in court house.....	
Illinois.....	Chicago.....	August 24, 1:30 P.M.	Bldg. tuberculosis hospital, \$300,000.....	
New York.....	Brooklyn.....	August 24, 2:30 P.M.	Bldg. nurses' training school, Kings County Hospital.....	
Utah.....	Logan.....	August 24, 3 P.M.	Constructing, complete, U. S. Post Office.....	
New Jersey.....	Trenton.....	August 24, 3 P.M.	Constructing Municipal Bldg., complete; \$35,000 check.....	
Ontario.....	Welland.....	August 24.....	Bldg. post office building.....	
Georgia.....	Cedartown.....	August 24.....	Bldg. 2-story jail, 40 x 60 ft.....	
New York.....	West Point.....	August 24.....	Repairing mess hall and cadet hospital.....	
New York.....	Raybrook.....	August 25, 10 A.M.	Bldg. cottage with heating, plumbing and electric work; also farm for State Hospital for Tuberculosis.....	
Ohio.....	Lancaster.....	August 25, noon.....	Remodeling building and building stone house and cottage, Industrial School.....	
Rhode Island.....	Central Falls.....	August 25.....	Bldg. brick and steel school, 4 stories high.....	
Ohio.....	Postoria.....	August 26, noon.....	Bldg. wings of high school building.....	
Illinois.....	Chicago.....	August 26.....	Bldg. Bohn high school.....	
New Jersey.....	Fort Hancock.....	August 27, 2 P.M.	Painting building and laying composition floor.....	
Illinois.....	Hillsboro.....	August 27, 2 P.M.	Erecting County jail; A. B. Frankel, E. St. Louis, Architect.....	
California.....	Santa Rosa.....	August 27, 3 P.M.	Constructing, complete, U. S. Post Office.....	
Ohio.....	Logan.....	August 28, noon.....	Constructing fire escapes on school building.....	
Ohio.....	Alliance.....	August 28, noon.....	Bldg. pipe tunnel and installing piping, Fairmont Children's Home.....	
Ohio.....	Piqua.....	August 28.....	Building 5 semi-attached school buildings.....	
Minnesota.....	Anoka.....	August 29, 1:30 P.M.	New heating boiler, etc., for County Court House.....	
Texas.....	Canadian.....	August 31, 2 P.M.	Bldg. 3-story brick court-house with heating system.....	
Arkansas.....	Little Rock.....	August 31, 3 P.M.	Constructing, complete, extension to Federal Bldg.....	
Nebraska.....	Deshler.....	August 31.....	School building.....	
Ohio.....	Columbus.....	September 1, noon.....	Altering laundry building of hospital.....	
Wisconsin.....	National Home.....	September 1, noon.....	Bldg. dormitory for nurses.....	
Minnesota.....	St. Paul.....	September 1, noon.....	Plans for mech. arts high school; 3 prizes.....	
Ohio.....	Greenville.....	September 1, 3 P.M.	Constructing, complete, U. S. Post Office.....	
Mississippi.....	Charleston.....	September 1, 2 P.M.	Bldg. brick school; P. J. Krouse, Meridian, Architect.....	
West Virginia.....	Buckhannon.....	September 1.....	Bldg. 14-room and 8-room school.....	
Ohio.....	Cleveland.....	September 2, noon.....	Installing plumbing and sewers in Fullerton and Fairmont schools.....	
North Dakota.....	La Moure.....	September 2, 2 P.M.	Bldg. court house, including jail.....	
Virginia.....	Fort Monroe.....	September 3, 10 A.M.	Bldg. library, barracks, officers' quarters, etc.....	
Pennsylvania.....	Philadelphia.....	September 3.....	Completing municipal building, \$190,000.....	
Mississippi.....	Agri. College.....	September 4, 9 A.M.	Bldg. chapel and academic building.....	
New Hampshire.....	Portsmouth.....	September 5.....	Furnishing 160 naval prison cells, plumbing, etc.....	
Washington.....	Bremerton.....	September 5, 11 A.M.	Installing electric elevator.....	
Indiana.....	Liberty.....	September 7, noon.....	Installing plumbing for court house.....	
Oklahoma.....	Buffalo.....	September 7.....	Bldg. 2-story cement block, brick or stone court house, 60 x 60 ft., to cost \$20,000, and be paid for on rental plan.....	Chas. Orr, Director. E. W. Field, Auditor. Capt. Ernest R. Tilton, Const. Q. M. Director Clay. A. J. Moore, Secretary. R. C. Holliday, Navy Dep't, Wash- ington, D. C. R. C. Halliday, Navy Dep't, Wash- ington, D. C. County Commissioners. E. L. Hubbard, Clk. Harper Co.



## Bridges

Wisconsin.....	Milwaukee.....	August 20, 10:30 A.M.	Bldg. bascule bridge over Milwaukee river, E. Water St.; \$25,000 check.....	C. J. Poetsch, Chm. Bd. Pub. Wks.
Wisconsin.....	Milwaukee.....	August 20, 10:30 A.M.	Bldg. concrete steel highway bridge across Kinnickinnic river.....	Aug. N. Garvin, Compt.
Georgia.....	Atlanta.....	August 20, noon.....	Bldg. rein. concrete viaduct 126 ft. long, 61 ft. wide, 30 ft. high.....	D. Lee Ward Koper, C. E., Candler Building.
Pennsylvania.....	Huntington.....	August 20, noon.....	Constructing iron bridge in Clay Twp.....	County Commissioner.
Illinois.....	Lenzburg.....	August 20, 8 P.M.....	Bldg. concrete and I-beam bridge.....	Henry Schneiderwind, Vil. Clk.
Oklahoma.....	Durant.....	August 20.....	Furnishing and erecting superstructure of two 130-foot span steel bridges; also concrete foundations and steel tubular piers.....	J. M. Abbott, Chm. Co. Com'rs.
Texas.....	Vernon.....	August 20.....	Bldg. bridge, 1,560 ft. long, including approaches.....	County Commissioners.
Washington.....	Spokane.....	August 20.....	Bldg. steel girder and tubular pier bridge at E. Olive St.....	J. T. O'Brien, Sec'y Bd. Pub. Wks.
Pennsylvania.....	Pottsville.....	August 21, 10 A.M.....	Bldg. reinforced concrete bridge in West Penn. Twp.....	Chas. T. Straughn, County Compt.
Rhode Island.....	Woonsocket.....	August 21, 4 P.M.....	Bldg. stone arch or concrete and steel arch bridge, Sayles St.....	Frank H. Mills, City Engineer.
Ohio.....	Rocky River.....	August 22, 11 A.M.....	Bldg. concrete bridge over Rocky river; cost, \$253,620.....	A. B. Lea, Co. Eng'r, Cleveland.
Ohio.....	Warren.....	August 24.....	Sub and superstructure 100 x 14 ft. bridge over Creek.....	County Commissioners.
Washington.....	Colville.....	August 24, 9 A.M.....	Bldg. bridge over Skookum bridge, near Lenora.....	County Commissioners.
Illinois.....	Belvidere.....	August 24, 5 P.M.....	Bldg. three 74-ft. wooden spans, 18 ft. roadway, two 6-ft. walks, on new cement piers, now in place.....	Jos. W. Fox, Chm. St. & Alley Com.
Ohio.....	Springfield.....	August 25, noon.....	Bldg. bridge over Buch Creek a d headrace, at Nelson St.....	Wm. H. Mahoney, Clk. B. P. S.
Pennsylvania.....	Norristown.....	August 26, 11 A.M.....	Bldg. highway bridge over Mill Creek, Lower Merion twp.....	John H. Dager, Eng'r Co. Com'rs.
Washington.....	Spokane.....	August 27.....	Bldg. reinforced concrete bridge, \$74,000.....	J. T. O'Brien, Sec'y Bd. Pub. Wks.
Ohio.....	Columbus.....	August 28, 2 P.M.....	Constructing roadway on Central College Bridge.....	John Scott, County Clerk.
Michigan.....	Grand Rapids.....	August 28, 8 P.M.....	Furnishing and laying joist and sidewalk plank for Pearl Street bridge.....	Sam'l A. Freshney, Sec'y Bd. P. W.
Ohio.....	Irondale.....	August 28.....	Bldg. substructure of bridge in Salina Twp.....	J. M. Reynolds, County Auditor.
Indiana.....	Indianapolis.....	August 29.....	Bldg. five concrete culverts.....	County Commissioners.
Ohio.....	Lima.....	August 29.....	Bldg. steel bridge; also draw bridge.....	C. W. Johnston, Chm. Bd. Co. Comrs.
Cuba.....	Havana.....	August 31, 2 P.M.....	Bldg. viaduct over Almendares river; Wm. Barclay Parsons, N. Y. City.....	Governor, Province of Havana.
Ohio.....	St. Clairsville.....	August 31.....	Bldg. sub and superstructures of several county bridges.....	A. W. Beatty, County Auditor.
Montana.....	Missoula.....	September 1, 10 A.M.....	Bldg. bridge over Missoula river 42 feet wide.....	W. H. Smith, County Clerk.
Minnesota.....	Two Harbors.....	September 1.....	Constructing 80-ft. span steel bridge over Beaver river; cost, about \$4,500.....	County Auditor.
North Dakota.....	Fargo.....	September 2, noon.....	Bldg. one 30-ft. and one 40-ft. bridge.....	Arthur G. Lewis, County Auditor.
Illinois.....	Chicago.....	September 2, noon.....	Equipping 8-track bridge at Campbell Ave.....	J. J. Bryan, Clk. Sanitary Dist.
Ohio.....	Cleveland.....	September 5.....	Bldg. concrete bridge.....	Wm. F. Black, Clk. Bd. Co. Com'rs.
Arizona.....	Morenci.....	September 16.....	Bldg. light truss bridge, 190 ft. long, steel frame power house, 65 x 80 steel tanks.....	Morenci Water Company.

## Lighting and Electricity

Indiana.....	Crown Point.....	August 22, noon.....	Electric light fixtures, etc., for Court House.....	Chas. A. Johnson, County Clerk.
Ohio.....	New Bremen.....	August 24, noon.....	Bldg., complete, a. c. 2-phase, 60-cycle, 2,300-volt system.....	Franklin Eng. Co., Douglas Bldg., Columbus.
Wisconsin.....	Port Washington.....	August 25, 7:30 P.M.....	Three 100 h.p. water-tube boilers, 100 h.p. and 200 h.p. tandem compound condensing Corliss engines, 75 and 150 k.w., 3-phase, 60 cycle, 2,300 volt generators; 3 panel switchboard, 75 lt. arc transformer and regulator, 60 h.p. induction motor, with all accessories; also addition to power house.....	W. B. Krause, City Clerk.
West Virginia.....	Wheeling.....	August 26, 11 A.M.....	Bldg. power-houses at Dams 18, 19 and 26, Ohio river.....	Cap't F. W. Alstaetter, Eng'r Caps.
Illinois.....	Chicago.....	August 26.....	Installing electrical works, engines and dynamos for Bowen high school.....	Committee on Bldgs. and Grounds.
Wisconsin.....	Keweenaw.....	August 27, 8 P.M.....	Constructing electric light plant.....	J. H. Breumer, Mayor.
Minnesota.....	Brainerd.....	August 27.....	Bldg. dam and hydro-electric plant; oil electric plant.....	H. J. Spencer, City Clerk.
West Virginia.....	Wheeling.....	August 31, 11 A.M.....	Bldg. power house at Dam No. 13, Ohio river.....	Cap't F. W. Alstaetter, U. S. Army.
Manitoba.....	Winnipeg.....	August 31, noon.....	Supplying 50,000 carbons for series a. c. enclosed arc lamps, 4 cored and 1 solid.....	M. Peterson, Sec'y Bd. of Control.
Illinois.....	Galesburg.....	September 1.....	Wiring Knox County almshouse for lighting by electricity; also piping and fixtures for gas.....	Frank L. Adams, Clerk.
Alabama.....	Russellville.....	September 1.....	Constructing water and light plant.....	W. H. Austin, Town Clerk.
Wisconsin.....	Kenosha.....	September 8, 8 P.M.....	Electric street lighting for 5 and 10 years, from Aug. 20, 1909; 155 or more street arc lamps, 2,000 c.p.....	Geo. W. Harrington, City Clerk.
Connecticut.....	Hartford.....	September 14, 11 A.M.....	Lighting streets with electricity for 1 and 5 years.....	City Clerk.
Manitoba.....	Winnipeg.....	September 15.....	Electric lighting plant and carbons.....	F. A. Cambridge, City Electrician.
Washington.....	Tacoma.....	September 19.....	Water power, electric light and power plant.....	H. J. McGregor, Com'r Pub. Wks.
Wisconsin.....	Green Bay.....	September 23.....	Gas and electric fixtures, etc., new Co. Court House.....	Elmer S. Hall, Clk., Brown Co.
Porto Rico.....	Ponce.....	October 15.....	Constructing electric light plant.....	Blass C. Silva, City Engineer.

## Miscellaneous

New York.....	New York.....	August 20.....	Work and material for approach to new Public Library.....	Henry Smith, Pres. Park Bd.
Iowa.....	Eldora.....	August 20.....	Constructing 21,000 feet tile drain, 10 to 18 in.....	R. M. Vigers, County Auditor.
Illinois.....	Paris.....	August 21, 10 A.M.....	Constructing tile drain.....	Walter Mallonee.
Indiana.....	Vincennes.....	August 21, 2 P.M.....	Disposal of dead animals, garbage and nightsoil for 10 years.....	C. L. V. Tucker, City Clerk.
Massachusetts.....	Port Andrews.....	August 25, 10 A.M.....	Bldg. crematory bldg.; also crematory.....	Cap't Ira L. Fredenhall, Q. M.
California.....	Oakland.....	August 26, 10 A.M.....	Machine cleaning of bituminous rock and wood block streets for one year.....	Walter B. Fawcett, Sec'y Bd. Pub. W.
Massachusetts.....	Boston.....	August 26, noon.....	Bldg. two fire pumps for fire boats.....	Sam'l D. Parker, Fire Com'r.
Massachusetts.....	Boston.....	August 26, noon.....	Bldg. fire boat.....	Sam'l D. Parker, Fire Com'r.
Ohio.....	Warren.....	August 26.....	Straightening Mosquito Creek at site of new bridge.....	Board of County Commissioners.
Ohio.....	Youngstown.....	August 29, noon.....	Collection and removal of garbage for five years.....	Dr. H. E. Welch, Health Officer.
Indiana.....	Indianapolis.....	August 29.....	Fire concrete culverts.....	Board of Co. Commissioners.
Ohio.....	Sentinel.....	August 31.....	Constructing earth fill over culvert.....	County Auditor.
South Carolina.....	Charleston.....	September 5.....	Furnishing creosoted lumber and rubblestone.....	Cap't E. M. Adams, Eng'r Corps.
Ohio.....	Cincinnati.....	September 10, 2 P.M.....	Constructing concrete dam at Brown's Island, Ohio River.....	Colonel Wm. T. Russell, U. S. A.

## STREET IMPROVEMENTS

**Anniston, Ala.**—Estimates are being made for paving certain streets.—W. F. Richey, Chairman.

**Los Angeles, Cal.**—The citizens of Los Angeles County voted to issue \$35,000,000 bonds for improving highways connecting principal cities and towns in the county.

**San Diego, Cal.**—Improvements to roads and highways are being discussed.

**San Francisco, Cal.**—The Board of Public Works is considering the matter of paving Minna street with basalt blocks laid on a concrete foundation.

**Middletown, Conn.**—State Highway Commissioner MacDonald has decided to macadamize a four-mile stretch of road between this city and Meriden.

**Norwich, Conn.**—State Road Commissioner McDonald will shortly take up the matter of constructing two new state roads from the end of the macadam in this town to Scotland road and to Occum.

**Washington, D. C.**—The Commissioners have decided to repave a portion of Pennsylvania avenue S. E.

Thirteenth street northwest will be macadamized as far north as Park road.

The District Commissioners have issued an order for the resurfacing of the north side of the carriageway on Pennsylvania avenue southeast, between Eighth and Eleventh streets.

**West Palm Beach, Fla.**—A new road is proposed and improvements are to be made as soon as possible.

**Chicago, Ill.**—It is expected that the Board of Local Improvements will shortly take up the matter of putting down a new pavement on Dearborn street, from the river to Van Buren street.

**Freeport, Ill.**—An ordinance has been passed providing for the paving of Galena avenue with brick and cement curb; cost, \$30,000.—G. W. Graham, City Engineer.

**La Salle, Ill.**—Plans are under way for a new boulevard link, to be constructed between the north and west sides.—Mayor Busse.

**Rockford, Ill.**—The Council will have estimates prepared for paving certain streets with asphalt.

**Hammond, Ind.**—The Board of Public Works instructed the City Engineer to draw up plans and specifications for a pavement in Field avenue.

**Indianapolis, Ind.**—A committee of citizens headed by H. H. Johnson, has petitioned the Indianapolis Traction and Terminal Company to pave with wooden blocks between the car tracks on Pennsylvania street, between Thirty-fourth and Thirty-eighth streets.

**Lebanon, Ind.**—A movement is on foot in this city to undertake the bricking of several streets.

**Anamosa, Ia.**—The City Council is said to

have under consideration the paving of a portion of Cleveland avenue with macadam.

**Burlington, Ia.**—City Council has recently passed a resolution providing for the paving of Sunnyside street in this city; this street extends from one city limit to the other.

**Mason City, Ia.**—The Council has proposed to pave certain streets in this city. Creosoted blocks will be used on Fourth and Superior streets.

**Paris, Ky.**—The Bourbon County Fiscal Court is stated to have appropriated \$7,075 toward the construction of turnpikes throughout Bourbon County.

**New Orleans, La.**—The Streets and Landings Committee have reported favorably on the ordinances for paving Erato street from Carondelet to Claiborne, and Clio street, from Prytanla to Dryades.

**Annapolis, Md.**—Commissioners of Anne Arundel County have approved of the route through Anne Arundel, recently selected by the State Good Roads Commission.

**Fitchburg, Mass.**—Council has been petitioned for the paving of Daniels street.

**Winchendon, Mass.**—Summer residents of Winchendon are interested in a new road from Winchendon Springs to the New Hampshire line.

**Holden, Mass.**—Funds amounting to \$3,000 are on hand for proposed State road, to be built in this town.

**Haverhill, Mass.**—The Common Council has passed a resolution providing for the paving of Locust street.

**Lawrence, Mass.**—The State highway on Jackson street in this city is to be resurfaced.

**Springfield, Mass.**—An order has been passed providing for laying out and establishing the extension of Water street south, cutting through Gardner, Norwood, Broad, Elmwood and York streets, commonly known as the Pecousic avenue extension. The estimated cost of the project has recently been raised from \$20,000 to \$40,000. When completed, the avenue will be 100 feet wide.

**Springfield, Mass.**—Contracts will soon be awarded for improvements to be made to State highway.

**Benton Harbor, Mich.**—The City Council passed a resolution for grading and paving West Main street, from Tenth street to the St. Joseph River. The City Engineer will prepare plans.

**Detroit, Mich.**—The Common Council directed the Department of Public Works to advertise for proposals for paving Belvidere avenue, from Chapin street to Gratiot avenue, 26 feet wide, with cedar blocks, on concrete foundation, with Medina, Berea or other suitable curbing; estimated cost, \$11,539.—J. J. Haarer, Commissioner.

**Anaconda, Mont.**—Front street and a part of Utah street will be paved this year with vitrified brick.

**Butte, Mont.**—City Council has ordered that Arizona street, from Platinum to Park streets, be paved, and also Galena street, from Main to Arizona street.

**Butte, Mont.**—It is practically settled that Front street adjacent to the Northern Pacific depot will be paved during the present season, and perhaps the pavement will be extended up Utah avenue to Arizona street and thence on to Park, to connect with the pavement already established on that street.

**Allaire, N. J.**—It is planned to improve the road from this town to Squankum.

**Camden, N. J.**—At a recent meeting of the City Council, Councilman Hewitt introduced a resolution providing for the paving of Twenty-fourth street, from Federal to Howell street, with sheet asphalt.

**Jersey City, N. J.**—Application has been made to the Board of Street and Water Commissioners for the improvement of Bishop street by laying a Belgian pavement, resetting curbing and laying flagging.

**Newark, N. J.**—Public Works Commissioners will advertise for bids for the paving of South Fourteenth street in this city; a resolution has also been passed providing for the paving of Market street, from the Court House to Bowery street, and Ferry street, from Market street to Bowery street, and Lentz avenue.

**Paterson, N. J.**—Work of plowing up the macadam on Carroll street in this city has been started. A new concrete bed will be laid to receive the creosoted block pavement which is to be laid between Park avenue and Broadway.

**Point Pleasant, N. J.**—The City Council has decided to expend \$24,000 for street improvements.

**Trenton, N. J.**—The City Council has adopted a resolution providing that the City Clerk shall advertise for the paving of Princeton avenue.

A sheet asphalt pavement with brick gutter will be laid on Olden avenue, from Parker avenue to Hamilton avenue.

**Verona, N. J.**—The Borough Council has passed a resolution providing for the macadamizing of Lakeside avenue.

**Batavia, N. Y.**—The Farwell Realty Company, John H. Ward, manager, will build an extension to East avenue to the Byron road. Work will consist principally of grading and sewers.

**Niagara Falls, N. Y.**—City Engineer W. D. Robbins is preparing plans for paving Fourth street, from the east line of Third street to Cedar avenue.—Walter P. Horne, Clerk Board of Public Works.

**Rensselaer, N. Y.**—The Board of Aldermen has recently passed an ordinance providing for the paving of First street, from Catherine street, to McNaughton avenue, and McNaughton avenue, from Broadway to First street, and Tracy street, with granite blocks; a portion of Riverside avenue will also be paved with pressed brick.

**Syracuse, N. Y.**—Action will shortly be taken in the matter of constructing the proposed boulevard from the city to the State Fair Grounds.

**Ashtabula, O.**—The City Council has voted to proceed with the improvement of Columbus street, from Pearl street to the Lake Shore bridge, a distance of one mile, by grading and laying a storm sewer; also voted to grade Fern and Middle streets.—L. A. Amsden, City Engineer.

**Columbus, O.**—Sealed bids will be received by the County Commissioners of Franklin County, O., until September 3, for the purchase of \$58,900 of 4½ per cent. Franklin County road improvement bonds. Said bonds will be dated September 1, 1908, and will bear interest at the rate 4½ per cent. per annum, payable semi-annually on the first day of

March and September of each year; bonds are in denominations of \$1,000 each.

**Columbus, O.**—Bids will be received Aug. 20 for \$5,000 Tyler Free turnpike road bonds.

**Defiance, O.**—August 25 bids will be received for the purchase of \$18,000 5 per cent. 18-year paving bonds.—Thomas E. German, City Auditor.

**Fostoria, O.**—An ordinance has been passed which provides for the macadamizing of about a mile of Columbus avenue for a width ranging from 14 to 35 feet, at an approximate cost of \$19,559.

**Madisonville, O.**—August 28 bids will be received for the purchase of \$8,000 one to ten year 4 per cent. street improvement bonds.

**Marion, O.**—Bids will be received Aug. 15 for \$2,250 Dennison free turnpike road bonds.

**Martin's Ferry, O.**—An ordinance has been passed for paving the alley between Cemetery road and Center street with brick.

**Ravenna, O.**—Aug. 24 bids will be received for the purchase of \$14,000 4½ per cent. street improvement bonds.—E. W. Martin, Village Clerk.

**Toledo, O.**—A petition is being circulated asking that a 2-inch coating of asphalt be laid on Euclid avenue, from Starr avenue to Front street.

**Butler, Pa.**—Automobilists of this city are planning a good road between this point and Pittsburg.

**Brackenridge, Pa.**—Bids for the work of paving North Canal and Cherry streets in this city have been rejected and the work will be readvertised.

**Danville, Pa.**—Surveys are being made for a new State highway, to extend four miles from the southern end of the Danville River bridge, through Riverside borough to Sunbury.

**Danville, Pa.**—The matter of repairing the macadam on North Mill street is being agitated.

**Gettysburg, Pa.**—A movement has been started for the construction of the Lincoln memorial boulevard, to be built at the expense of the government from Washington to this city by way of Westminster, Md.

**Harrisburg, Pa.**—Contracts will shortly be awarded for the paving of Meadow lane, Court and Mary streets, Second Ward; also a portion of Mulberry street, between Front and Third streets.

**Lebanon, Pa.**—At a recent meeting of the Common Council an ordinance was introduced providing for the macadamizing of Forge street, between Fourteenth and Fifteenth streets.

**Mechanicsburg, Pa.**—Borough Council has plans under way for the macadamizing of Factory street and work will probably begin shortly.

**Pittsburg, Pa.**—Contracts will shortly be let for the paving of a number of streets, including Cecil alley, Forward avenue, Friendship avenue, Craig street and Bellefield avenue.

**Waynesburg, Pa.**—The Hallam Construction Company, of Washington, has been awarded contracts for paving two blocks on Lincoln street, two on Washington, two on Franklin, two on West, one on Montgomery and a half block on Green at the following prices: Grading, 48 cents per cubic foot; brick paving, \$1.48 per square yard; curbing, 62 cents per lineal foot.

**Charleston, S. C.**—It is stated that arrangements for a new highway between this city and Savannah are soon to be made.

**Memphis, Tenn.**—The Board of Public Works has plans under way for the paving with brick of Mississippi boulevard, from Iowa avenue to the city limits, and McLe-more avenue, from Mississippi boulevard to Rayburn boulevard.

**Memphis, Tenn.**—This city will pave Mississippi boulevard, from Iowa avenue to city limits; McLe-more avenue, from Mississippi to Rayburn boulevard, and Rayburn boulevard, from McLe-more to Calhoun avenue, a distance of four miles; brick is to be used.—James H. Malone, Mayor.

**Dallas, Tex.**—Property owners of Columbia avenue, this city, have petitioned for the paving of that thoroughfare with bitulithic.

**Houston, Tex.**—The City Council has voted to issue \$100,000 in bonds to cover the cost of additional paving and street improvements.

**Salt Lake City, Utah.**—Council is considering the matter of resurfacing Main street, from First South to Fourth South streets.

**Norfolk, Va.**—Judge Portlock, of Norfolk County, has appointed A. H. Martin, C. W. Brown and G. Long Road Commissioners to look after public highways of the county.

**Spokane, Wash.**—Captain John H. Gray, of the Second Ward, will shortly introduce an ordinance in Council providing for the paving of Third avenue, from Monroe to Division streets, with asphalt.

**Tacoma, Wash.**—An ordinance has been passed for the improvement of Columbia avenue, from Sheridan avenue to Sprague avenue, by establishing grades and laying curbs, gutters and crosswalks.

**Tacoma, Wash.**—County Commissioners have ordered surveys for two new county

roads, to be known as the Ollard extension road and Swindell's road.

The Council recommends the improving of I and J streets by paving.

**Philippi, W. Va.**—Bonds have been authorized for the purpose of constructing brick pavements.

**Superior, Wis.**—A meeting of the Board of Public Works was recently held for the purpose of taking final action in the paving of Hammond avenue.

## SEWERAGE

**Birmingham, Ala.**—Former City Engineer Julian Kendrick has been engaged by the city to prepare plans for the extended sewerage system, for which \$400,000 bonds were recently authorized.

**Decatur, Ala.**—New Decatur City Council has plans under way for the construction of a sewerage system for South New Decatur.

**Graymont, Ala.**—The city has voted \$10,000 of bonds for the construction of sanitary sewers.—W. A. Lester, Mayor.

**Little Rock, Ark.**—Plans are being prepared for the sewer system to be constructed in Binghamton Heights.

**Stuttgart, Ark.**—The city is considering the construction of a sanitary sewer system.

**Clarendon, Ark.**—The city contemplates the construction of a sewer and water system. Estimated cost, about \$45,000.

**El Centro, Cal.**—Olmsted & Gillelen, 664 Grant Building, are preparing plans for the sewerage system, which is to cost about \$35,000. An election is to be held to vote on the issuing of bonds for this purpose.

**East San Jose, Cal.**—Election is to be held Aug. 21 to vote bonds for constructing sewer system.

**Escondido, Cal.**—Plans have been prepared for sewer system and septic tanks for this place, and \$14,500 bond issue is to be sold to pay for work.—Olmsted & Gillelen, Engineers, Los Angeles, Cal.

**Oakland, Cal.**—Board of Public Works has recommended construction of new sewer in Broadway, from Twelfth street south to the estuary; cost, \$15,000.

**San Diego, Cal.**—City Engineer has prepared plans and specifications for constructing University Heights sewer, and bids are to be asked shortly.

**Truckee, Cal.**—Town has sold \$16,000 bond issue and will install sewer system.

**Willows, Cal.**—An election will be held to vote on the question of issuing \$20,000 in bonds for sewer construction.

**New Haven, Conn.**—The New Haven Board of Health has recommended an appropriation of \$220,000 for an incinerating plant for the city.

**Athens, Ga.**—The Sewer Committee has reported favorably on the petition of citizens living on Franklin and Cobb streets for a sewer line.

**Cairo, Ill.**—Board of Local Improvements has ordered the construction of six sewers, to cost about \$4,000.

**Farmer City, Ill.**—Board of Local Improvements, as result of public hearing July 28, has adopted resolution for the construction of a sewer system, to cost \$21,000.—W. W. Smith, Engineer.

**Springfield, Ill.**—An ordinance has been passed for the construction of a sewer to drain the south ends of Fourth and Fifth streets.

**Ft. Wayne, Ind.**—The Council will advertise for bids for constructing sewers in Forest Park.

**Indianapolis, Ind.**—C. A. Brown, Sewer Engineer, has plans under way for the construction of the Brightwood sewer, which will cost about \$100,000.

**Kewanna, Ind.**—State Board of Health has advised this town to secure engineer to make plans for a sanitary sewer system.

**Lafayette, Ind.**—Board Public Works is considering constructing sewer in Alabama street.

**Lafayette, Ind.**—Plans are under consideration for the construction of a sewer in Alabama street.

**Grundy, Ia.**—The Iowa Engineering Company, of Clinton, Ia., has been directed to prepare plans for sewer system.

**Humboldt, Ia.**—The City Council offers for sale \$3,000 sewer bonds.

**Iowa City, Ia.**—A movement has been started by the residents of Raphael place to secure the construction of a sewer system in that section of the city.

**McGregor, Ia.**—Town sewer system, damaged by recent floods, is to be reconstructed.—Prof. A. Marston, City Engineer.

**Hutchinson, Kan.**—City Clerk will call for bids shortly for constructing sanitary sewer in east part of city.—John Rodgers, City Engineer.

**Topeka, Kan.**—A resolution asking for the construction of a new sewer in Kenwood addition has been prepared and will shortly be introduced in Council.

**Latonia, Ky.**—Construction of trunk sewers is proposed.

**Lexington, Ky.**—No bids were received for the construction of seven sewers advertised



by the city for tenders Aug. 4. Mayor Skain attributes the lack of estimates to the method of payment, which compels the contractors to look to the individual property owners.

**Baltimore, Md.**—Proposals will be received Aug. 17 for the purchase of \$1,000,000 of city stock of the new sewerage line.

**Lowell, Mass.**—The following petitions were recommended by the Committee on Sewers at a meeting recently held: A surface water drain in Billerica street, from the Boston and Maine Railroad bridge to the Concord River; a 100-foot extension of the Crawford street sewer; sewers in Kensington street; lowering of the sewer in Dutton street, to about 5 feet, at a cost of probably \$2,200.

**Malden, Mass.**—The sum of \$5,000 has been appropriated to make a survey this fall for a sewerage system in Linden.

**Hancock, Mich.**—The cost of constructing a sewer system in West Hancock has been estimated at \$10,450.

**Iron River, Mich.**—August 22 bids will be received for the purchase of \$25,000 5 per cent. five-year sewer bonds.—James Henley, Village Clerk.

**Lansing, Mich.**—Residents of East Lansing favor a bond issue for the construction of a water system, to cost \$7,100, a drainage system to cost \$3,800 and a sewer to cost \$1,500.—Samuel Hadden, City Surveyor.

**Sault Ste. Marie, Mich.**—City Surveyor estimates cost of proposed Eureka street sewer at \$13,500.

**Saginaw, Mich.**—Residents of the First Ward near the spot where the trunk sewer of the ward empties into the bayou are complaining of the disagreeable odor issuing from the sewer; it is probable that steps will be taken at once to have the sewer extended to the river.

**Austin, Minn.**—This city contemplates the construction of 2,200 feet of 8-inch tile sewer.

**Crookston, Minn.**—Cost of sewerage Alexander and other streets is estimated by the City Engineer as being \$4,605.

**Mankato, Minn.**—Surveyor Walter F. Brooks, 331 Center street, is preparing plans for a 24-inch pipe ditch, thirty miles long, near the town of Ormsby, in Martin County. He is also preparing plans for five or six miles of heavy dredge work in Martin County; also for a four-mile ditch of 24-inch tile, in Faribault and Martin Counties.

**Brookhaven, Miss.**—Another movement has been started in this town to secure the construction of a sewerage system.

**Lincoln, Neb.**—At a recent meeting of the Council, Alderman Sawyer moved that city engineering department be instructed to map out the proposed storm sewer extensions so that the bond issue question could be voted on this Fall.

**Manchester, N. H.**—Street and Park Commissioners will recommend the installation of an incinerating plant for the disposal of the city garbage.

**Newark, N. J.**—The Common Council Aug. 7 adopted a resolution to enter into the contract with the other municipalities and the Passaic Valley Sewerage Commission for the construction of a trunk sewer from the Paterson Falls to New York Bay, to accomplish the purification of the Passaic River.

**New Brunswick, N. J.**—The Sewerage Committee will shortly recommend to Common Council that bids be advertised for the factory sewer on George road.

**Plainfield, N. J.**—Council has passed a resolution to the effect that the borough of North Plainfield should be allowed to use the Plainfield sewer beds as an outlet for its proposed system, and that the Streets and Sewers Committee be empowered to prepare plans for submission to this body.

**Trenton, N. J.**—Sewers will be built in Melrose, Emmet, Lyndale and Centennial avenues.

**Albany, N. Y.**—The City Engineer is preparing plans for sewers in Patton avenue, Washington avenue and a portion of Fourth street.

**Batavia, N. Y.**—Frederick K. Wing, C. E., of Buffalo, appointed to examine the plans submitted for a sewerage system and submit a report to the Sewerage Advisory Committee, presented his report on Aug. 6, in which he recommends the plans of Alex. Potter, of New York, N. Y. The plans provide for a disposal plant, a force main and two laterals, one to relieve the Swezey property on East Main street and the other the Liberty street section.

**Bath, N. Y.**—State has appropriated \$12,800 for improvements at Soldiers' and Sailors' Home, to include construction of a sewer from the hospital to the sewage plant.

**Brooklyn, N. Y.**—Members of the James F. Burks Association, with headquarters at Thirty-seventh street and Thirteenth avenue, will shortly take up the matter of a trunk sewer, which has been promised to the upper Martense section for the past three years.

The business men of the neighborhood of Hamburg and Knickerbocker avenues and Stockholm street, Williamsburg, have complained to the borough authorities about the

bad sewerage system of that section of the city.

**Fayetteville, N. Y.**—E. D. Smalley, C. E., Syracuse, N. Y., has prepared plans for sewer system for this village; estimated cost, \$25,000.

**Gates, N. Y.**—Consulting Engineer W. R. Sterey, 510 Ellwanger & Barry Building, Rochester, N. Y., has completed plans and sealed bids will be received by M. J. Maginn, Clerk Town board of the town of Gates, at office of Engineer, for the construction of a brick sewer in Jay street; sewer to be from 3 to 5 feet in diameter and about 2,700 feet long.

**Fulton, N. Y.**—At recent meeting of the Board of Public Works Superintendent Flynn was authorized to purchase 350 feet of 18-inch iron pipe to be used in relaying the sewer along the canal banks out of the Oswego Falls Pulp and Paper Company's plant.

**Jamaica, N. Y.**—At the regular meeting of the Evergreen Board of Trade the sewer question was discussed.

**New Rochelle, N. Y.**—Bonds will shortly be sold, a portion of which will be used in the construction of sewers.

**Oswego, N. Y.**—City Engineer Snyder has presented to Council a report on the construction of the East Tenth street sewer and submitted two plans, one following the general lines of the creek, to cost \$71,030, and the other for a system independent of the creek, to cost about \$72,818.

**Rochester, N. Y.**—Soundings have been taken one and a half miles out in Lake Ontario for the sewer that it is planned to build on the east side of the river from the city limits to the lake. The sewer will cost approximately \$1,000,000. It is not probable that bids for the work will be advertised for right away.

**Utica, N. Y.**—The cost of the construction of the proposed Parker street sewer, from Clinton street to near Jason street, has been filed with City Clerk Burke.

**Chillicothe, O.**—The City Council passed an ordinance to issue \$350 in bonds for Water and Mulberry streets' sanitary sewer; the bonds run for ten years and bear 4½ per cent. interest.

**Columbus, O.**—Governor Harris, of Ohio, will ask the Governors of Kentucky, Indiana, West Virginia and Pennsylvania to join with him in appointing a commission to take steps to prevent the pollution of the Ohio River by sewage. The Ohio Legislature at its session last winter approved an appropriation of \$1,000 for this purpose.

**Covington, O.**—A protest has been entered against the construction of the proposed sewer between Eleventh and Twelfth streets and Bullock and Lee streets; it is claimed that the sewer should be constructed on Eleventh street.

**Dayton, O.**—Plans for the construction of the proposed new storm water sewer in Bolder avenue, to cost \$32,870, have been filed. The sewer will begin at the Miami River in Edgemont and will extend to one block west of the Big Four Railroad.

**Dayton, O.**—The Board of Health has authorized Clerk to advertise for bids for the construction of a sanitary sewer in District No. 5.

**East Liverpool, O.**—Clerk Hughes was instructed by the Board to advertise for bids for the construction of a storm sewer in Avondale street.

The Board has decided to recommend the construction of a sewer on Norton street.

**Hamilton, O.**—L. A. Dillon, City Engineer, has completed plans and estimates for \$20,000 worth of sewers to be constructed in suburbs of this city.

**Lexington, O.**—The city is considering the matter of constructing seven new sewers.—Address Mayor Skain.

**Lockland, O.**—Clerk Vedder has been instructed to notify the County Commissioners to rebuild the sewer across Main street at Vine street.

**Martins Ferry, O.**—The city officials will shortly consider the matter of a new sewer system to carry off the surface water after storms.

**Oakley, O.**—Sealed bids will be received at the Clerk's office until September 8 for the purchase of bonds in the aggregate sum of \$750, dated Aug. 1, 1908, and payable in 20 years from date, bearing interest at the rate of 5½ per cent. per annum, payable annually. Bonds are issued for the purpose of paying the village portion of the cost and expense of constructing a sewer in a part of Webster avenue, Clark street and the Madison pike.

**Warren, O.**—Council of this city has decided to proceed on the sewer system in Northwest Warren. It is also proposed by this city to construct a sanitary sewerage system to care for the sewage from the district on the west side of the Mahoning River and lying between Dickey Run on the north, Hoyt Run on the south and the city line on the west. This district comprises about 70 acres of land.

**Youngstown, O.**—A resolution has been

adopted by City Council providing for the construction of a sewer in Canton street, between Bellview street and South avenue.—M. C. Higgins, President of Council.

**Muskogee, Okla.**—Plans are completed for storm sewer work, for which \$300,000 of bonds were sold on Aug. 3. Plans are also about completed for \$250,000 worth of water extensions.—L. B. Kinsey, City Engineer.

**Pendleton, Ore.**—Engineer Palmer has submitted plans for the construction of a sewer system in the extreme western section of the city; cost, \$7,000.

**Marshfield, Ore.**—City Council has ordered the reconstruction of the sewer in the business district of North Marshfield.

**Allentown, Pa.**—The Board of Health and Sanitary Committee of Councils will take steps to enlarge the crematory.

**Chester, Pa.**—F. Herbert Snow, Chief Engineer of the State Department of Health, says that it will be necessary for Chester to rearrange its sewer system, and that the cost will amount to about \$5,000,000.

**Columbia, Pa.**—State Health Department has approved of plans for the construction of a separate sewer system in this town.

**Conemaugh, Pa.**—Local press reports state that this place has great need of a new and modern sewer system.

**Harrisburg, Pa.**—Taxpayers of Allison Hill have appointed a committee to confer with the Council regarding construction of sewers in that district.

**Johnstown, Pa.**—Mayor Wilson is reported to be in favor of an election to vote on a \$1,000,000 loan for river, sewer and highway improvements.

**Lebanon, Pa.**—An ordinance has recently been introduced in Council authorizing the Steitz Hat Company to lay a terra cotta storm sewer from the hat factory to connect with the Seventh street storm sewer; also for the construction of an 18-inch storm sewer on Cumberland street, between Fifth street and Pleasant alley.

**McAdoo, Pa.**—This borough has voted Aug. 1 to install a sewer system.

**Mt. Gretna, Pa.**—The matter of a sewage disposal plant for this borough is being considered.

**New Castle, Pa.**—Ordinances are before the Councils authorizing the building of many new sewers in different parts of the Wallace addition, including West Clayton street, Eighth street and other thoroughfares.

**Pittston, Pa.**—Council has passed an ordinance providing for the construction of a lateral sewer on Parsonage street.

**Wilkes-Barre, Pa.**—Residents on School House lane, Ahlborn and North Washington streets, have been ordered by the Board of Health to make connections with the sewers which have been laid on those streets.

**Zelienople, Pa.**—The State has been forced to hold up the work of constructing sewers in this town.

**Cranston, R. I.**—Council has passed a resolution appropriating \$750 as a contribution to the construction of a sewer laid by the Narragansett Brewing Company at a cost of \$2,000.

**Narragansett Pier, R. I.**—At the town meeting Aug. 8 a resolution was passed providing for the expenditure of \$30,000 in the construction of an intersecting sewer running to a point at the rear of the Sea View Railroad station and the erection there of a septic tank with all necessary appurtenances, as well as a line of pipe from the tank to the present outlet at Taylor street; John Babcock has been appointed a member of the committee to have charge of the matter.

At recent town meeting proposition to construct a mile and a half of sewers in this town was voted.

**Woonsocket, R. I.**—At a recent meeting of the City Council an ordinance was introduced for the construction of sewers in Union and Pine streets.

**Florence, S. C.**—The property owners have petitioned the City Council to hold an election to vote on the issuing of \$80,000 bonds to construct a system of sewers and to extend the present water works.

**Huron, S. D.**—The citizens will vote on the question of issuing \$60,000 in bonds for sewer purposes.

**Knoxville, Tenn.**—The citizens of the Tenth Ward living west of Ninth street will ask the Council to consider ways and means to raise funds to build a main sewer from the Southern Railway along Third Creek to the Tennessee River.

**Park City, Tenn.**—The citizens voted to issue \$105,000 worth of bonds for sewer and street improvements; a City Engineer will be elected.

**Beaumont, Tex.**—The County Commissioners will at once issue \$50,000 in bonds for drainage and improvements.

**Cuero, Tex.**—City officials are considering granting a franchise to a firm from Taylor, Tex., for installing sewer system here.

**Sulphur Springs, Tex.**—City is to install sewer system.—Leon Dalton, Dallas, Tex., Engineer.

**Salt Lake City, Utah.**—City has voted to



issue \$125,000 of bonds for sewer work and \$475,000 for extension of water works.—L. C. Kelsey, City Engineer.

**Basic City, Va.**—The city has voted \$25,000 of bonds for sewer, water works and paving.—W. H. Page, Mayor.

**Norfolk, Va.**—City Council has authorized an appropriation for the construction of sewers in Cedar Grove annex to this city.

**Spokane, Wash.**—Common Council has recently passed an ordinance providing for the improvement of Thirteenth avenue, from the west line of Helena street to center line of Perry street by construction of a sewer.

**Tacoma, Wash.**—An ordinance has been passed providing for the construction of 8, 12, 15 and 18 inch terra cotta pipe sewers on a number of streets.

**Columbus, Wis.**—The citizens have voted to issue bonds for the construction of a sewerage system.

**Guayaquil, Ecuador.**—The Sewerage and Water Supply Board of the city of Guayaquil, Ecuador, S. A., desires to let contracts for the sewerage and paving works of the city. Plans, etc., can be obtained on application to the International Bureau of the American Republics, 2 Jackson place, Washington, D. C.

## WATER SUPPLY

**Floralia, Ala.**—The city has voted \$10,000 of bonds for water works improvement.

**Greenville, Ala.**—An election will be held Aug. 24 to decide the question of issuing \$23,600 water works bonds.

**Clarendon, Ark.**—The city contemplates installing a water and sewer system; artesian water will be supplied; estimated cost, \$45,000.

**San Francisco, Cal.**—The Manufacturers and Producers' Association of California have adopted a resolution that it is for the best interest of San Francisco for the city to purchase the Spring Valley water system at a fair valuation.

**Colorado Springs, Col.**—The Council is considering the matter of establishing a municipal water plant.

**Wilmington, Del.**—Changes have been made in the plans prepared for slow sand filters, and it is expected to ask bids about Sept. 1. The plan outlined is to have the contractor bid on the plans, this bid to be considered the cost price in any negotiation leading up to the purchase of the plant by the city; the contractor is to furnish filtered water at a fixed price per 1,000,000 gallons, plus interest on the cost of plant, until such time as the city may be able to sell bonds for the purchase.—John A. Kienle, Chief Engineer Water Department.

**Pensacola, Fla.**—The Board of Bond Trustees has authorized the purchase of a pump for the water works plant, which has been in use in Wilmington, Del.; it will cost \$5,000 at Wilmington and about \$2,000 to ship; the pump has a capacity of 3,000,000 gallons and cost \$17,000 a few years ago.

**St. Petersburg, Fla.**—The city has voted \$7,000 of bonds to purchase a steam pump for the water works plant.

**Ocala, Ga.**—\$15,000 in bonds have been authorized for the extension of water mains.—N. J. Faulk, Mayor.

**Cedar Rapids, Ia.**—The City Council and the Water Commissioners have decided on the construction of a 12-inch water main on North Seventh street west, from F avenue to M avenue.

**Sioux City, Ia.**—Petitions will shortly be presented to the City Council by the Cole's Addition Improvement Association, asking that water mains be provided for that part of the city.

**Chicago, Ill.**—Harry L. Emerson, County Surveyor, has outlined plans for the establishment of a high water pressure system in the downtown district.

**DeKalb, Ill.**—The Council has passed an ordinance authorizing an issue of \$5,000 water works bonds.

**Robinson, Ill.**—The Robinson Water Works Company has been authorized to issue \$35,000 receiver's certificates to be expended in improving the water and light plant.—Willis H. Clinton, Receiver.

**Evansville, Ind.**—The Grote Manufacturing Company has been awarded the contract of sinking test wells for filter plant foundations; Edward F. Sonntag has been awarded the contract of rebuilding the river wall at pumping station.

The Common Council has appropriated \$225,000 for the construction of a filtering plant.

**New Castle, Ind.**—With the idea of providing better water supply for the protection of the City Council is having an estimate prepared of the cost of a reservoir, 700,000 gallons capacity, to be built on land adjoining the municipal plant.

**South Bend, Ind.**—The question of building a new pumping station at a cost of between \$125,000 and \$150,000 is being considered. An alternative proposition is to enlarge the capacity of the present pumping station and install new machinery.

**Carlisle, Ky.**—J. Willard Halley, of Cincinnati, has been looking over the ground with a view to establishing a water works system.

**Carlisle, Ky.**—It is reported that the establishment of a water works system is being urged.

**Newport, Ky.**—The Water Works Commission of Newport has decided to ask bids for constructing a standpipe in Clifton of 50,000 gallons capacity and estimated to cost \$15,000; the question of installing an extra engine at the pump house will probably be voted on at the Fall election.

**Kansas City, Mo.**—L. P. Cunningham, of Joplin, Mo., has petitioned the Council for franchise to furnish the city with water brought from the Ozark Mountain.

W. C. Goodwin and City Engineer R. L. McAlpin, appointed to submit an estimate on the value of the plant of the Metropolitan Water Company, have submitted the report and place the value at \$846,275; the city is considering the purchase of the plant and the company has asked \$1,400,000.

**Shakopee, Minn.**—Loweth & Wolf, Consulting Engineers, St. Paul, Minn., are preparing plans for a complete water works system here; bids will be asked about September 1.—C. T. Welland, City Recorder.

**Virginia, Minn.**—Newell C. Knight & Co., of Chicago, Ill., is reported, have purchased the Centennial reservoir site in Madison County and will at once construct a dam larger than the present dam.—Geo. R. Metlen, Superintendent.

**East Lansing, Mich.**—It is proposed to construct a 6-inch well, 120 feet, install a motor and pump, an elevated tank probably 1,500 barrels, and about 8,000 feet of 2, 3 and 6 inch mains, and that an election will soon be held to vote on the issuing of \$8,750 bonds for said purpose.—S. C. Hadden, City Surveyor.

**Hubbell, Mich.**—It is stated that \$20,000 bonds are to be issued by the village for the construction of a water plant.

**Poplarville, Miss.**—Improvements are to be made to the water and light plants and the citizens have voted \$10,000 bonds for this purpose.—J. W. Ford, Mayor.

**Lynn, Mass.**—The residents of North Saugus are agitating the question of securing water supply; it is stated that a petition will be presented at the next town meeting.

**Montague, Mass.**—The State Board of Health at Boston has approved the plans for the Lake Pleasant water supply district in this town; a system of pipes is to be laid to Lake Pleasant village and the pressure will be furnished by the Turner Falls system.

**Northampton, Mass.**—The Water Department will lay 3,000 feet of 16-inch pipe through Federal street, Bay State, to a point near Nonotuck street, Florence, to connect with the 2-foot main; also about 750 feet of 4-inch pipe in High street.

**New Bedford, Mass.**—Petitions have been received for the extension of water mains on a number of streets.

**Springfield, Mass.**—The State Board of Health at Boston has approved the plans for new filters at the plant at Bear Hole, West Springfield; the Water Board at Springfield, it is reported, will soon ask for bids for constructing the filter and for new pipe lines to be laid throughout the town.

Specifications for Contract No. 4 of the Little River water system call for 12 miles of pipe, all of which is to be 42 inches in diameter. The specifications contain the following items: 1,321 lineal feet of 54-inch steel pipe, 16,000 lineal feet of steel pipe ¼ inch thick, 34,000 lineal feet 42-inch steel pipe 5-16 inch thick, 7,900 lineal feet 42-inch steel pipe 7-16 inch thick, 1,800 tons cast-iron pipe, 100 tons specials, 61,300 lineal feet laying cast-iron pipe, 3,000 cubic yard rock excavation, 1,300 cubic yard concrete; special work at Westfield River crossing, steel or iron; special work for crossing all other brooks, roads and railroads, steel or iron; old rails.

**Baltimore, Md.**—The Fire Board have selected Daniel B. Banks, of Baltimore, as Engineer for the proposed pipe line system, which will cost about \$500,000.

**Lincoln, Neb.**—At a recent meeting of the City Council Councilman Schroeder introduced a resolution calling for the construction of three new wells at Mockett Station.

**Fargo, N. D.**—City Engineer Samuel Crabbe has completed plans for new water works, including a filtration plant.

**Grand Forks, N. D.**—City Council has ordered the construction of 1,650 feet of water main on North Third street.

**Charlotte, N. C.**—The city will extend the water mains to Elizabeth Heights, a distance of about 5,000 feet, using 8-inch piping; estimated cost, \$4,000.—H. Franklins, Mayor.

**Camden, N. J.**—The city officials are preparing to install an auxiliary water supply.

**Canajoharie, N. Y.**—A special election will be held Aug. 18 for voting on the question of raising \$75,000 for the purpose of providing the village with a suitable municipal water system.

A special election will be held Aug. 18 on the question of expending \$75,000 for a new water works.

**Far Rockaway, N. Y.**—Attempts are now being made to get water mains laid to Broad Channel, Rockaway, so as to furnish that section with fresh water.

**Geneseo, N. Y.**—The Village Board is considering the installing of a filter bed in the reservoir at an estimated cost of \$20,000.

**Hamburg, N. Y.**—The Town Boards of Hamburg, West Seneca and Blasdell recently held a joint meeting and discussed the question of securing a better supply of water for the towns, which are now furnished water by the Depew and Lake Erie Water Supply Company.

Plans are being considered for a joint water plant, to cost \$235,000, for the towns of Hamburg, West Seneca and Blasdell.

**Marcellus, N. Y.**—The village has recently voted to bond for \$25,000 for the construction of a water system; the water will be obtained from Rockwell's pond, which is located 216 feet higher than the town.

**Piermont, N. Y.**—The subject of a water system for this town and for Grand View is being discussed. It is suggested that an artesian well on South Mountain would provide an adequate supply.

**Rome, N. Y.**—Plans are under way for the construction of a pure and adequate water supply; the water will be conveyed from Fish Creek.

**Sherman, N. Y.**—Plans are being prepared for new water works.

**Webster, N. Y.**—A public meeting of taxpayers and citizens was recently held for the purpose of considering the project of supplying Webster village with water from the Borkhuis spring, in Penfield.

**West Seneca, N. Y.**—Engineer Getman has completed estimates for pumping plant, pipe line and reservoir for West Seneca.—Jos. Leath, Town Clerk.

**Liverpool, O.**—The Board of Public Service recently held a meeting for the purpose of conferring with Engineer L. E. Chapin, of Pittsburg, regarding the proposed improvement of the water works system in this city; it is planned to construct six new wells in the Ohio River.

**Struthers, O.**—An independent water company to run in opposition to the Mahoning Water Company is being talked of by the citizens; if the new concern is organized the erection of a standpipe will be undertaken at once.

**Sandusky, O.**—The Service Board has submitted an estimate for the construction of a new water main in Pierce street.

**Wellsville, O.**—Plans will shortly be made for improving the water supply.

**Shawnee, Okla.**—The City Clerk offers for sale \$25,000 4½ per cent. water works bonds.

**Eugene, Ore.**—The city of Eugene purchased of the Willamette Valley Company the water system that is used in supplying the city; the price paid was \$140,000.

**Altoona, Pa.**—Ordinances are pending providing for water mains on Orchard avenue and a number of other streets.

**Catasauqua, Pa.**—A citizens' meeting has passed a resolution requesting Council to secure data regarding the cost of a new municipal water supply plant.

**Conemaugh, Pa.**—The Johnstown Water Company, of Johnstown, has petitioned for a franchise for water works in Conemaugh.

**DuBois, Pa.**—Estimates on the cost of the extension of water mains in several streets at a cost of \$556 have been accepted and the pipe ordered to be purchased.

**Elwood City, Pa.**—The Water Committee of Council has offered to pay the water company \$27.50 a year for fire hydrants instead of \$45, as at present, and that the consumers pay 30 cents per thousand.

Plans and specifications have just been prepared by the Elwood City Water Company for the construction of a pumping plant, filter basin, etc., to be located at the mouth of Slippery Rock Creek.

**Lebanon, Pa.**—An ordinance is pending appropriating \$200 for a survey by a hydraulic engineer for a route for a 20-inch pipe from Smith's reservoir, where the present 16-inch main from the dams is reduced to a 12-inch main, to the city mains.

**Malvern, Pa.**—Borough Council is arranging for the construction of a standpipe to increase the water supply.

**Scranton, Pa.**—The Scranton Gas and Water Company will extend its line along Keyser avenue, West Scranton, for the purpose of supplying residents of that section with water.

**Trucksville, Pa.**—Preparations are now being made by the Spring Brook Water Supply Company for the construction of a dam near its filter.

**Windber, Pa.**—The Windber Water and Power Company has let to Frank Lowry, of Windber, contract for building a nine-mile pipe line to the borough's new reservoir on the waters of Clear Shade Creek.

**Florence, S. C.**—The City Council is considering the matter of extending the present water works system.

**Langford, S. D.**—Arrangements are being made to secure water supply from artesian well.

**Platte, S. D.**—Plans are being worked out for the installation of a system of water works, to cost about \$20,000; a 70-foot tank will be erected and the mains will cover the entire town.

**Austin, Tex.**—Walter G. Kirkpatrick, of Jackson, Miss., is preparing plans for a reinforced concrete pumping station for the city water works, to cost about \$13,000.

**Brunner, Tex.**—The Brunner Water and Light Company, which has a franchise from the Harris County Commissioners to furnish water and light, will lay two miles of water mains and construct a water tower and reservoir, drill three artesian wells and make other improvements.

**Greenville, Tex.**—The city has voted \$95,000 of bonds for the purchase of the water works system.

**Houston, Tex.**—B. C. Smith, Jr., is a member of the committee appointed to supervise the construction of the 15,000,000-gallons water pumping plant.

**Port Arthur, Tex.**—The Port Arthur Water Company is preparing to greatly enlarge its power and capacity for electric lighting and power.

**Quanah, Tex.**—The citizens are agitating the question of putting in a large steel tank and mains throughout the business portion of the town.

**Waco, Tex.**—An additional loan of \$20,000 has been made to the Water Commissioners to be used in improving the water system.

**Panguitch, Utah.**—The question of constructing water works, to cost about \$20,000, is under consideration.

**Basic City, Va.**—Citizens on July 28 voted in favor of issuing \$25,000 bonds for constructing water works, sewer system and paving.—C. A. Van Lear, Mayor.

**Petersburg, Va.**—At a recent meeting of the City Council it was voted to make an appropriation of \$6,000 for the erection of a steel tower for the new water system inaugurated near the intersection of Virginia avenue and Diamond street.

**Milwaukee, Wis.**—City Engineer Chas. J. Poetsch has taken out a building permit for an addition to the North Point pumping station, to cost about \$28,000; the Board of Aldermen will be asked to appropriate the money for a new 12,000,000-gallon pump.

**Sheboygan, Wis.**—Negotiations between Mayor Dieckman and the city water company officials have been closed, which will result in the extension of the intake pipe 6,000 feet into Lake Michigan; distance is a little over a mile.

**Cashmere, Wash.**—Engineer Ward, of Wenatchee, is preparing plans for water works and an electric light plant, to cost about \$11,500.

**Georgetown, Wash.**—The city proposes to have a water system of its own and a bond issue of about \$40,000 will be necessary for the purpose.

**Renton, Wash.**—Seattle will shortly apply for a franchise for right of way for a second pipe line through this town.

**Seattle, Wash.**—Assistant City Engineer T. H. Carver, in charge of the city's system of water mains, was directed by the Fire and Water Committee of the Council to prepare other plans for a system of salt water mains for fire protection, extending from Jackson street to Pike street, with a connecting main running through Third avenue, between these points.

Assistant City Engineer T. H. Carver, in charge of the city's system of water mains, was directed by the Fire and Water Committee of the Council to prepare other plans for a system of salt water mains for fire protection, extending from Jackson street to Pike street, with a connecting main running through Third avenue, between these points.

L. B. Youngs, Superintendent of the municipal electric light plant, has applied to the City Council for an appropriation of \$288,400 for extensions to the plant and city lighting system.

**Tacoma, Wash.**—A resolution has been passed ordering the construction of a 6-inch cast-iron water main on Pacific avenue, from South Twenty-ninth to South Thirtieth street.

**Lovell, Wyo.**—The town will purchase pipe, etc., necessary to construct the water works contemplated here, but the work will be done by local labor; probable cost, \$15,000.—W. T. Lovell, Engineer.

## LIGHTING AND ELECTRICITY

**Brewton, Ala.**—Plans are being considered to change the municipal electric light plant to 2,300-volt, 60-cycle, 3-phase system, installing a 100-kw. plant in duplicate.—Jas. S. Sheffield, Superintendent.

**Gadsden, Ala.**—The Etowah Light and Power Company, of Attalla, has petitioned Council for permission to enter this city and furnish electricity for lighting and power purposes.

**Wynne, Ark.**—Plans are being considered to double the output of the municipal electric light plant and change the system from

direct to alternating current.—F. E. Leonard, Manager.

**Florence, Col.**—The Eastern Colorado Electric Power Company, which is establishing a generating plant near Glenwood Springs, has filed an application for the right to use the undeveloped water of Grape Creek; the purpose of the company is to furnish power for several mills and smelters in this country.

**Eagle Grove, Ia.**—Plans are being considered for increasing the output of the Citizens' Light, Heat and Power Company's plant; the plans include the installation of an additional boiler, the replacing of the present direct-current dynamo with a large machine, or the addition of an additional generator.—J. A. Innes, Secretary and Manager.

**Ft. Wayne, Ind.**—The residents of the Lakeside suburb have petitioned the gas company to extend gas mains.—Max Hoffmann, Superintendent.

**Logansport, Ind.**—Professor Esterline, of the Purdue University, at Logansport, has been selected to prepare plans and specifications for re-equipping the municipal electric light plant.

**Marion, Ind.**—Members of the Municipal Light Committee, appointed by the City Council, deny the report that there will be no municipal commercial lighting plant established; on the contrary, representatives of electrical machinery companies are already on the ground figuring on the work.

**Chicago, Ill.**—The North Shore Consolidated Gas Company, of which Knowlton A. Ames, of Evanston, is President, and which is building and operating gas works at Waukegan, North Chicago, Lake Bluff, Lake Forest, Highland Park, Libertyville, Glenview and Winnetka, has given to the Central Trust Company a trust deed to all of its property to secure a bond issue of \$3,000,000 payable August 1, 1938, with interest at 5 per cent. Of the bonds \$600,000 are to be issued immediately, \$700,000 are to be reserved for the purpose of retiring a like amount of bonds of the North Shore Gas Company and \$1,700,000 are to be issued from time to time for the purpose of acquiring property and improving and bettering the condition of the property.

**Duquoin, Ill.**—The Duquoin Light, Heat and Power Company interests have been bought by Chicago capitalists represented by Henry I. Lea; improvements will be made.

**Robinson, Ill.**—The Robinson Water and Light Company has authority to issue \$35,000 receiver's certificates for extending the water and light plant.—Willie H. Chilton, Receiver.

**North Anson, Me.**—Work will begin soon on the concrete and timber dam, 200 feet long, to be erected by the Franklin Power Company, at Cleveland Rips, on the Carra-basset River, in North Anson; the power developed will be used in the generation of electricity for illuminating and manufacturing purposes in several Franklin County towns; it is expected that the current will be available for use in Farmington in October.

**Shelburne Falls, Mass.**—The Shelburne Light and Power Company is reported to be considering the construction of a new power station on Deerfield avenue.

**Brown City, Mich.**—Plans are being prepared to install an additional engine and dynamo in the municipal electric light plant.—A. Clemens, Manager.

**Mayville, Mich.**—Plans are being prepared to install another boiler in the municipal electric light and water plant.—R. L. Blackmore, Manager.

**Reed City, Mich.**—The Oscola Light and Power Company is planning to install auxiliary steam power plant and install new turbines and construct a new cement dam.—H. L. Milesbaugh, Manager.

**Detroit, Minn.**—Plans are being considered for building a new municipal electric light plant next year.—Geo. Learman, Superintendent.

**Lake City, Minn.**—Arrangements are being made to install another 300-h.p. engine in the municipal electric light plant.—E. V. Lombard, Superintendent.

**Butler, Mo.**—The managers of the municipal electric light and power plant are considering the question of furnishing electricity for operating the pumping station of the Butler Water, Light and Power Company, if contract is secured, will establish a day service.—H. M. Cannon, Superintendent.

**California, Mo.**—The California Electric Light and Power Company will rebuild electric plant or sell same to city; the plant, if purchased by the city, will be rebuilt in connection with proposed water works.

**Carthage, Mo.**—The Empire Electric Power and Supply Company has acquired a water power about six miles from Carthage, and will install water wheels and alternators, and erect a 3-phase transmission line to supply electricity to operate the local system.—R. J. Claffin, Secretary.

**Western Springs, Mo.**—Plans are being considered to install an induced draft system in the municipal electric plant.—Albert Erichson, Manager.

**Townsend, Mont.**—The citizens are contemplating increasing the output of the municipal electric light plant and will install a 75-kw. single-phase dynamo.—Henry M. Ogden, Manager.

**Wilson, N. C.**—Plans are being made for rebuilding the municipal electric light plant and greatly improving the system; the equipment of the plant will consist of one 450-h.p. Corliss engine direct connected to a 300-kw. 2,300-volt, 3-phase, 60-cycle, revolving-field generator; one 150-kw., 2,300-volt, 3-phase, 60-cycle, revolving alternator belted; one 60-h.p., 3-phase motor to drive arc machine; one 20-kw. exciter direct connected to motor, and one 20-kw. belted exciter, new switchboard, etc.—C. E. B. Egerton, Manager.

**Troy, N. C.**—Contract has been awarded for the construction of a dam on Little River, five miles from Troy, which will develop about 1,500 h.p. for transmission by electricity; the dam will be 22 feet high, and it is hoped that it will be completed during this year; S. J. Smitherman and J. C. Hurley are the leaders of the enterprise, and power will first be furnished to the Smitherman Cotton Mills.

**Buffalo, N. Y.**—J. J. O'Leary, President of the Buffalo Electric Construction Company, has been engaged to prepare plans and specifications, including estimates, for the electric lighting plant for the City Hall.

**Bath, N. Y.**—The Citizens' Electric Service Company has been granted permission by the Public Service Commission at Albany to construct an electric plant.

**Rochester, N. Y.**—The Standard Underground Cable Company submitted the only bid for 30,000 feet of conductor cable for the fire alarm system, their price being 14.81 cents per foot. F. L. Hughes & Co. bid \$32 each for 12 fire-alarm box standards.

The Rochester Railway and Light Company is planning to increase its storage battery capacity and erect new transmission lines and increase its water power.—R. M. Searle, Manager.

**Syracuse, N. Y.**—The Onondaga County Commissioners are having plans prepared for a detached power building to furnish power, heating and lighting at the new Onondaga County Home; specifications for power building will be finished and bids will be called for about Sept. 1; capacity, 1,000 lights; power plant is to consist of three horizontal tubular boilers, 150-h.p. capacity, equipped with ash and coal-handling machinery; three generators direct connected to automatic high-speed engines, with capacity to generate 75-k.w. each.

**Ely, Nev.**—The Ely Light and Power Company contemplates rebuilding its main transmission line through Ely to Lane City.—Jas. E. Johnson, Manager.

**Alamogordo, N. M.**—The Alamogordo Light and Power Company contemplates developing a water power of 1,000 h.p. about eight miles from city.—M. H. Fisher, Manager.

**Ashtabula, O.**—The Board of Public Service has appropriated \$28,000 for purchasing electric light machinery.

**Hamilton, O.**—Plans are being prepared for the construction of a new electric power plant, to be operated by the Hamilton Hydraulic Company. It is stated that the power plant will be owned by the Harding estate and will be located in this city at the corner of Front and Buckeye streets; work will commence on the construction of the plant as soon as plans are prepared; the plant will be under the management of T. A. Jones, Superintendent of the Harding Paper Mill, of Excello, O.—Frederick G. Mueller, Architect.

**Warren, O.**—Mayor Kilpatrick vetoed the ordinance granting 25-year light and power franchises to the Warren Water and Light Company and the Hydro-Electric Company, and it is now a question whether the Council will pass the ordinances over the veto; the Hydro-Electric people declare that if they do not get a franchise from Warren they will bring their factory to Newton Falls, where they are already building two large power houses.

**Duncan, Okla.**—Plans are being considered by the Duncan Light and Ice Company to increase the equipment of its plant, including the installation of a 100-kw., direct-current, 3-wire, 250-volt generator direct connected.—W. L. Bumpass, Manager.

**El Reno, Okla.**—Chicago, Rock Island and Pacific Railway is arranging preliminary work for installing 150-kw. electric plant in power house at its El Reno yards; equipment will generate power to operate roundhouse and shops, furnish light, etc.

**Hood River, Ore.**—The Hood River Electric Light, Power and Water Company contemplates changing part of its lines from 2,200 to 6,600 volts and the purchase of about 40 small transformers.—W. H. Chipping, Superintendent.

**Joseph, Ore.**—The Joseph Electric Light and Power Company contemplates installing a new turbine and generator in its plant this year; it is proposed to change the location of the plant and increase the output.—W. D. McCully, Manager.



**Milton, Ore.**—The citizens are considering the question of increasing the output of the municipal electric light plant to 300 or 400 kw.—W. R. Craig, Superintendent.

**Prineville, Ore.**—The construction of a long-distance transmission line is now under consideration by the Prineville Light and Water Company.—C. L. Shattuck, Superintendent.

**Hamburg, Pa.**—The Hamburg Electric Company will change the street lighting system from open to enclosed arc lamps, and is in the market for a boiler of 125-h.p. engine and a 50-light, 6.6-amp. arc machine.—Frank Curtis, Superintendent.

**Olyphant, Pa.**—It is proposed to increase the output of the municipal electric plant by the installation of an additional unit of 200 kw.—John J. Carbine, Superintendent.

**Scranton, Pa.**—An ordinance has been introduced in the City Councils providing for the placing of all electric wires underground, including those for fire alarm and police telegraph systems, and excepting only the trolley wires of the street railway company.

**Weatherly, Pa.**—Plans are being considered to install two 150-hp. tubular boilers in the municipal electric light plant.—H. Chamberlain, Superintendent.

**Beresford, S. D.**—Louis Wagner, owner of the local electric light plant, contemplates changing the street lighting system to 60-watt tungsten lamps.

**Newport, Tenn.**—Unaka Tanning Company will erect an electric plant to furnish power for operating its tannery and machinery of Chilhowee Extract Company; a dam will be constructed on Pigeon River for developing water power.

**Galveston, Tex.**—The Brush Electric Light and Power Company contemplates constructing about five miles of power circuits.—Fred M. Loge, Jr., Manager.

**Ripley, Tenn.**—The Ripley Light, Water and Ice Company is making arrangements to move its plant and to change its system to 60 cycles and discard the direct-current service.—W. A. McCallum, Superintendent.

**Seguin, Tex.**—The Seguin Electric Light and Power Company is preparing plans for rebuilding its water power plant and expects to rebuild its transmission lines within the next six months.—L. A. Voigt, manager.

**Victoria, Tex.**—Mr. Locke, of Mexico, and Mr. Rogers, of Vernon, have secured a franchise to construct a gas plant in Victoria, to cost about \$75,000.

**Plainview, Tex.**—A franchise has been granted to the City Railway Company by the City Council for the construction of an electric car line in this city.

**Barton, Vt.**—The Village Electric Light Department is planning to build a steel penstock above 700 feet long in connection with the municipal electric light plant.—O. H. Mossman, Superintendent.

**Fredericksburg, Va.**—President W. G. Whitner, of the Fredericksburg Power Company, states that a new dam will be built across the Rappahannock River, just above the city.

**Culpeper, Va.**—The Culpeper Light and Ice Company contemplates extending its transmission lines to the suburbs.—G. F. Major, Superintendent.

**New Market, Va.**—The New Market Electric Light and Power Company is planning to extend its transmission line about two miles.—Rice Snapp, Secretary.

**Welch, W. Va.**—The Welch Water, Light and Power Company contemplates extending its transmission lines to Hemphill.—D. J. Howell, Manager.

**Basic City, Va.**—The City Council is considering installation of electric light and power plant and contemplates developing water power property, securing about 500 h.p.—W. H. Page, Mayor.

**Cashton, Wis.**—The State Railroad Commission has refused to grant permission to the city of Cashton to construct a municipal lighting plant; there is a plant in operation in the village, and the Commission is willing to permit the authorities of the village to purchase the said plant.

**Gillett, Wis.**—T. A. Pamperin, of Oconto, is reported to have petitioned Council for a franchise for an electric light plant.

**Hudson, Wis.**—The proposition to issue \$30,000 mortgage bonds, with which to erect a municipal gas plant for Hudson, was reconsidered and passed by a vote of 6 to 2.—B. W. Utson, Mayor.

**Buckley, Wash.**—The Buckley Electric Company is planning to develop a water power in the near future. W. A. Shumaker, President.

**Newport, Wash.**—The Northern Electric Company is planning to make extensions to its transmission lines and general repairs to its overhead system.—J. W. Beckwith, Superintendent.

**North Yakima, Wash.**—The Northwest Light and Power Company contemplates extending its transmission lines to several adjacent towns.—G. C. Arrowsmith, Superintendent.

**Vancouver, Wash.**—The Portland Railway,

Light and Power Company is planning to install a 500-kw. frequency changer to run off Portland circuit.—C. C. Curley, Manager.

**Wenatchee, Wash.**—The Wenatchee Electric Company contemplates making extensive extensions to its distributing system.—Chas. F. Kiser, Superintendent.

**Hamilton, Ont.**—Mayor Stewart has signed the contract power by-law.

**Port Arthur, Ont.**—Plans are being considered to construct a transmission line to Kakabeka Falls, a distance of 24 miles, and build a belt line and also double track its railway system in the near future.—W. P. Cooke, Chairman Electric Railway, Light and Telephone Commission.

**Trenton, Ont.**—The Trenton Electric and Water Company is planning a large water-power development.—J. J. Wright, of Toronto, Manager.

**Ponce, P. R.**—It is stated that the City Council will receive bids until October 15 for constructing an electric light plant.—Blas C. Silva, City Engineer.

**Moose Jaw, Sask.**—Plans are being made to increase the equipment of the municipal electric light plant, which include the installation of a 500-kw. steam turbine, 500-h.p. Babcock & Wilcox boilers, stokers and condensers.—E. K. Reading, Superintendent.

**Tokio, Japan.**—The Kobe Syndicate, Limited, has acquired a concession in the Japanese Alps capable of ultimately developing 300,000 h.p.; Julius M. Howells, Hydraulic Engineer, is expert for the syndicate; work will begin this Fall and the company will be able to deliver the power in two years.

## FIRE EQUIPMENT

**Hemet, Cal.**—The committee of fire protection recommends the purchase of hose, fire extinguishers and other apparatus.

**Los Angeles, Cal.**—\$5,000 will be expended in building a fire engine house in the Carroll Park District.

**Oakland, Cal.**—The Finance Committee of City Council has provided for an auxiliary salt water pumping plant at the foot of Perkins street, and appropriated \$499.

**Augusta, Ga.**—Arrangements are to be made for raising funds for a new fire apparatus for North Augusta Fire Department.

**Black Bear, Ida.**—This place is making extensive preparations to establish a fire department; the town was practically destroyed by fire in April.

**Averyville, Ill.**—Bids for a new fire engine house will soon be received by Council; it will be of brick and stone and cost \$5,000.

**Moline, Ill.**—Preliminary steps are being taken by the City Council for the erection of a fire station in the east end.

**Panora, Ia.**—Council has passed an order authorizing the purchase of hose for the Fire Department.

**New Orleans, La.**—President Meister, of the Fire Board, is working hard to secure equipment for the new engine house in the rear of the Second District.

**Hanover, Mass.**—A new fire house is to be erected.

**Nahant, Mass.**—Residents of the Bass Point settlement are agitating the matter of securing fire protection for that section.

**Ionla, Mich.**—Bids are soon to be opened for 800 feet of new hose and new hydrants.

**Duluth, Minn.**—The Board of Fire Commissioners will ask the city for funds to build an engine house at West Duluth, a new fire hall at Lakeside and an addition to No. 3 fire hall.

**Eveleth, Minn.**—A committee has been appointed to secure prices of hook and ladder truck.

**St. Louis, Mo.**—Plans have been given out by President O'Reilly of the Board of Public Improvement for the erection of new fire engine houses Nos. 36 and 37.

**Franklin Falls, N. H.**—At a recent meeting of the Council a recommendation was received from the Board of Fire Engineers calling for the purchase of 500 feet of hose, which was referred to the Fire Department Commission.

**Vailsburg, N. J.**—A site is to be purchased as soon as possible for a new firehouse.

**Gloversville, N. Y.**—The Board of Public Works and Fire Chief Maxson are considering the erection of a new fire department building, also remodeling present quarters occupied by the Fire Department in the City Hall into offices to be occupied by the City Chamberlain and City Clerk.

**Maplewood, N. Y.**—The Maplewood Fire Company (volunteers), Geo. Petrigal, President, will erect a Fire Department building.

**New Rochelle, N. Y.**—Bids will be received Aug. 18 for \$25,000 Fire Department bonds.

**Poughkeepsie, N. Y.**—Plans will probably be revised for a new hose house, to be erected for the Lady Washington Hose Company; cost, about \$10,500.—Alderman Burns.

**Watervliet, N. Y.**—At a meeting of the hose company recently organized in Maplewood, it was decided to secure a site as soon as possible for a new hose house.

**Asheville, N. C.**—The Board of Aldermen will soon purchase a new hook and ladder

truck and remodel the present fire-alarm system.

**Adams, N. D.**—The Council proposes to purchase fire apparatus.

**Portland, Ore.**—A new fire engine house is to be purchased for the Sellwood District.—Mr. Campbell is Chief of the Fire Department.

**Altoona, Pa.**—The East End Fire Company recently held a meeting, when plans were considered for a new firehouse to be erected at Pottsgrove avenue and East street.

**Olyphant, Pa.**—A new fire station is to be erected for the Blakely Fire Company No. 2.

**Philadelphia, Pa.**—Funds are being raised for new fire engine house for the James E. Dougherty fire station at Sayreville.

**Pittsburg, Pa.**—Architect E. C. Stotz is receiving bids for a two-story engine house for the Department of Public Works; \$35,000.

**Plymouth, Pa.**—Work has been started on a new hose house for Hose Company No. 1.

**Port Vue, Pa.**—The Reliance Fire Company, recently organized, has been granted the use of the borough hall and fire hose reel, property of the borough, until such time as new apparatus can be purchased by the members of the organization.

**Sunbury, Pa.**—A new hook and ladder truck, to cost \$700, is to be purchased for the local Fire Department.

**Arlington, S. D.**—Arrangements are being made to establish a fire company.

**Chattanooga, Tenn.**—Contracts will shortly be let for remodeling Fire Hall No. 3; plans for improvement have been made by Architects Adams & Olsup, James Building; \$5,000.

**Clarendon, Tex.**—The Fire Department has reorganized with Mayor Journey as President, and it is the intention of the Council to provide additional equipment as soon as possible.

**Houston, Tex.**—The Fire Commissioners will purchase new hose truck, to be placed at the engine house at Houston avenue and Spring street, in the First Ward.—James Appleby, Fire Commissioner.

**Ashland, Va.**—The Ashland Fire Company will shortly take steps to purchase a new engine.

**Ballard, Wash.**—Ordinance is now being prepared for erection of a new fire station in the Thirteenth Ward, to cost \$13,000.

**Everett, Wash.**—Chemical apparatus has been petitioned for the Fire Department by the Chief.

**Seattle, Wash.**—T. H. Carver, Assistant City Engineer, in charge of the city's system of water mains, has been directed by the Fire and Water Committee of the Council to prepare other plans for a system of salt water mains for fire protection, extending from Jackson street to Pike street, with a connecting main running through Third avenue between these points.

**Janesville, Wis.**—A resolution has been introduced in Council authorizing the Fire and Water Commission to negotiate for the purchase of a suitable steam fire engine.

**South Bend, Wash.**—Mayor Hubler will shortly take steps to better the Fire Department and to improve the present fire fighting apparatus.

**Tacoma, Wash.**—A new fire house at a street or Yakima avenue is now being discussed.—Chief McAlovy.

## PUBLIC BUILDINGS

**Birmingham, Ala.**—City Council has called an election to vote on the proposition of issuing bonds in the amount of \$350,000 for the erection of a new school, etc.

**Linden, Ala.**—\$10,000 in bonds have been authorized for the erection of school building.

**Malvern, Ark.**—Gibb & Sanders, of Little Rock, prepared plans for a new school for the Board of Education, to be brick and modern construction.

**Mena, Ark.**—The School Board has authorized the erection of a new high school; cost, about \$20,000.

**San Bruno, Cal.**—A meeting of the citizens was held on the 7th for the purpose of voting on site, etc., for new school, to cost about \$25,000.

**San Francisco, Cal.**—The Board of Supervisors has set aside \$240,000 to defray the cost of constructing a new county infirmary.

**Yreka, Cal.**—The Board of Supervisors of Siskiyou County rejected all bids for the erection of the Hall of Records building and will readvertise for bids.

**Middletown, Conn.**—Voters of the Fram Hill district have voted in favor of enlarging the school building.—A. Murray, Chairman.

**Westport, Conn.**—Contracts will shortly be let for the erection of the new Town Hall; plans are by Architects Brown & Van Buren, of New Haven.

**Chicago, Ill.**—The Chicago & Northwestern Railway has announced that its engineers and architects have completed the plans for its proposed Madison street passenger terminal, to cost \$20,000,000; the station will occupy practically four city blocks, bounded by Madison, Kinzie, Clinton and Canal streets.—E. C. Carter, Chicago, Chief Engineer.



**Granite City, Ill.**—Several sites are being considered for the proposed new \$70,000 Federal building.

**Hillsboro, Ill.**—A. B. Frankel, East St. Louis, Ill., has been selected to draw plans for a new two-story jail and Sheriff's residence for Montgomery County.

**Kewanee, Ill.**—Plans have been prepared for the erection of an addition to the city jail.

**Streator, Ill.**—City Council has plans for the erection of a \$4,500 public service building, to be located in the park.

**Anderson, Ind.**—Question of a new school building in Adams township is being considered.

**Cannelton, Ind.**—The citizens of Clark Township, at a recent meeting, discussed new high school, to be erected at Bristow.

**Martinsville, Ind.**—Foltz & Parker, Indianapolis, have completed plans for a three-story sanitarium for Dr. Hendricks, Martinsville; \$10,000.

**Orange, Ind.**—Question of erecting school building here is being considered.

**Brooklyn, Ia.**—Temple, Burrows & McLain, Davenport, are preparing plans for the erection of a two-story City Hall.

**Cedar Rapids, Ia.**—A site has been purchased for a fire station on the west side of the town.

**Glenwood, Ia.**—Bonds to the amount of \$75,000 have been issued for a new Court House in Mills County.

**Iowa Falls, Ia.**—A new city jail is to be erected this year.

**Mt. Pleasant, Ia.**—The Board of Education is contemplating the erection of a new school, to be brick and stone.

**Sioux City, Ia.**—The question of erecting another school is under consideration, to be located probably on the west side; a new \$100,000 high school is also proposed.

**Williams, Ia.**—A new City Hall is to be built this year, to be brick and 20x40 feet.

**Williams, Ia.**—J. R. White, architect, Webster City, has prepared plans for the erection of a one-story and basement Town Hall, 20x40 feet, constructed of pressed brick and stone.

**Boise, Ida.**—Government architects have plans under way for the enlargement of the Federal building; it is planned to extend the building towards Seventh street.

**Lewiston, Ida.**—At the November election the issuance of \$40,000 bonds is to be voted on for the erection of a new county jail.

A vote will be taken in November as to whether the county shall bond for \$40,000 for the erection of a new county jail building.

**Lawrence, Kan.**—The Board of County Commissioners have plans by W. T. Wellman, of this place, and Fred Gunn, of Kansas City, for a new county jail to be erected next to the county Court House.

**Paducah, Ky.**—School Board is considering issuing of bonds in amount of \$60,000 for erection of new school.

**Grand Cane, La.**—Plans will soon be prepared for a new school.

**New Orleans, La.**—Movement is on foot for the erection of a new school.

**Brentwood, Md.**—The Building Committee can be addressed for further information regarding a new brick school.

**Elkton, Md.**—Arrangements for a new Court House are being made.

**Hagerstown, Md.**—The contract for erection of the new postoffice building, Summit avenue and West Antietam street, will shortly be let. Structure will be one-story and of brick and stone, costing \$85,000, including site.

**Cambridge, Mass.**—Plans have been completed and contracts are soon to be awarded for improvements and repairs to City Hall.

**Fall River, Mass.**—It is probable that new plans will have to be prepared for the proposed Court House.—Andrew J. Jennings.

**Lynn, Mass.**—Penn Barney has prepared plans for new high school, to be located on North Common street; cost, about \$160,000.

**Northampton, Mass.**—Plans are soon to be secured for a new municipal building, to be erected in the Fall.—James W. O'Brien, Mayor.

Plans have been completed by Land & Hewlett, architects, 16 East Twenty-third street, for a library building to be built here for Smith College, at about \$150,000.

**Roxbury, Mass.**—The Building Committee of the Children's Institutions Department is contemplating the erection of a new school house at the Parental School, Spring street, West Roxbury; cost, about \$50,000.

**Sheffield, Mass.**—The Board of Selectmen have been presented with a check for \$5,000 by a wealthy resident of the town, to be used in the construction of a new high school building.

**Portland, Me.**—Plans are under way for the new City Hall, to be erected; the structure will be of granite.

**Portland, Me.**—The Committee on Public Buildings has voted to purchase property on Federal street as a site for the electrical appliance building.

**Detroit, Mich.**—Architects Donaldson & Meier have prepared plans for a two-story and basement eight-room schoolhouse for the Roman Catholic Church of Annunciation, Rev. Father James Stapleton, Rector.

Architects Malcomson & Higginbotham are preparing plans for a two-story and basement addition to the Eastern High School for the Board of Education; \$100,000.—Wm. J. Lee, Secretary.

**Grand Rapids, Mich.**—The erection of a convention hall is said to be under consideration.

**Gaylord, Mich.**—Architects Griffith & Fair, Bass Block, Ft. Wayne, Ind., are preparing plans for a two-story brick high school building, 40x80 feet, for the School Board, Gaylord, to cost 16,000.

**Houghton, Mich.**—Houghton County Board of Supervisors will take up the matter of repairing the Court House.

**Morris, Minn.**—Architects Thori, Alban & Fisher, St. Paul, are preparing plans for remodeling the Court House for the Stevens County Board, at Morris.

**Red Wing, Minn.**—Excavations are being made for the foundations of the new government building.

**St. Paul, Minn.**—An addition to the City Hall and Court House is contemplated; it will be of fireproof construction and cost about \$800,000.—E. G. Krahmer, County Auditor.

**Ellisville, Miss.**—A new Court House is proposed, to be modern construction and cost about \$60,000.

**Canton, Mo.**—The Board of Education will soon receive bids for a two-story school building; brick and stone composition, roof and steam heat; cost, \$20,000.

**Excelsior Springs, Mo.**—Architects Saylor & Seddon, Kansas City, have prepared plans for a one and one-half-story library and comfort station for the city of Excelsior Springs; \$5,000.—Mr. McRorey, City Clerk.

**Kansas City, Mo.**—C. B. Sloan has prepared plans for a two-story orphanage for the Perry Orphan Boys' Home; \$50,000.

Architect C. B. Sloan is preparing plans for a two-story hospital building for the Kansas City Homeopathic College; \$15,000.

Architect C. B. Sloan has prepared plans for a two-story hospital building for the Florence Crittenden Hospital; \$10,000.

**Palmira, Mo.**—The Board of Education will soon erect an addition to school building; two stories, brick and stone, composition roof, etc.

**St. Louis, Mo.**—The city is planning various municipal improvements, including the erection of Fire Engine Houses Nos. 36 and 37, and the erection of a building at the Female Hospital.

**Webb City, Mo.**—Council is considering the matter of making improvements to the city jail.

**Butte, Mont.**—No bids were received by Jas. Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C., for remodeling and constructing an extension to the U. S. postoffice at Butte.

**Deshler, Neb.**—Geo. Berlinger, Burr Block, Lincoln, has prepared plans for a new school to be brick and stone, two stories high, and cost \$12,000.

**North Platte, Neb.**—Several sites are being considered for the proposed new postoffice and court house building.

**Atlantic City, N. J.**—Plans have been prepared for fireproof school building to be built on Ohio avenue, at a cost of \$150,000. R. Ogden, architect.

**Carlstadt, N. J.**—The citizens of this place have voted to purchase a site on Division avenue, as recommended by the Board of Education, for a new school building.

**Jersey City, N. J.**—The Board of Finance has authorized the issuance of bonds amounting to \$900,000 for the erection of new schools and improvements to present buildings during the next two years.—George C. Tennent, President of the Board of Education.

**Morristown, N. J.**—The Morris Township Board of Education contemplates making improvements to township schools during the summer.

**Rahway, N. J.**—It was decided to hold a special meeting on August 12 for the purpose of discussing a new high school, to cost about \$100,000.

**Trenton, N. J.**—Two school buildings are to be erected here, at a cost of \$20,000. An addition will also be erected to one of the present buildings at a cost of \$12,000.

**Buffalo, N. Y.**—The rebuilding of police station in Franklin street has been approved by the Mayor.

**Dolgeville, N. Y.**—Special election will shortly be held for the purpose of voting on proposition to purchase site on which to erect a municipal building in this town.

**Gloversville, N. Y.**—The Board of Public Works contemplates considering remodeling present quarters occupied by the Fire Department in the City Hall into offices to be occupied by the City Chamberlain and City Clerk.

**Haverstraw, N. Y.**—Citizens of this place will hold a special election in September for

the purpose of voting on matter of erecting an additional school building.

**Irondequoit, N. Y.**—The School Board recently met and voted to appropriate \$5,000 for the purchase of land and the erection of an addition to Union School.

**Mount Sinai, N. Y.**—The local School Board is discussing plans for erection of new building and work will probably begin in the near future.—Wm. A. Davis, member of School Board.

**Newark, N. Y.**—A site will shortly be chosen for the erection of new village hall for which \$25,000 has been appropriated.

**New Rochelle, N. Y.**—The contract for the erection of a new school building on Washington avenue will shortly be let. The cost will be about \$86,000.—Mr. Crenen, President of Board.

**Phelps, N. Y.**—At a recent annual meeting of District No. 8, the question of enlarging the present school was discussed.

**Schenectady, N. Y.**—Common Council is considering purchase of the Dakin property to be used as site for the erection of a new City Hall.

**Williamsville, N. Y.**—Work has been commenced on the foundation of a new village hall and hose house. Cost of new structure, \$15,000.

**Bridgeport, O.**—Work will be commenced on a new school at West Wheeling; cost, about \$5,000.

**Columbus, O.**—Architects D. Riebel & Sons have completed plans for a two-story, ten-room school building for the Board of Education; \$80,000.

**Cleveland, O.**—The Board of Education is taking informal bids for an addition to the Woodland Hills School.

**Cleveland, O.**—Architects Whitfield & King, New York City, are preparing plans for a one-story and cellar branch library building for the Public Library Board. W. H. Brett, Librarian, Cleveland, \$40,000.

**Danville, O.**—Architects Howard, Inscho & Merriam, Columbus, have completed plans for a two-story school building for the Board of Education, Danville; \$25,000.

**Fremont, O.**—The Board of Education has decided to proceed at once with the erection of the new high school building. Bonds in the amount of \$75,000 will be sold for this purpose.

**Morristown, O.**—W. L. McWilliams, Clerk of the Board of Education of Union Township, will receive bids until August 15 for the purchase of 14 bonds of said township in the aggregated sum of \$1,492.

**Piqua, O.**—Architects Mills & Pruitt, Columbus, have completed plans for a two-story school building for the Board of Education, Piqua; \$40,000. Previously reported.

**Sabina, O.**—Architects Mills and Pruitt, Columbus, have completed plans for a two-story school building for the Board of Education, Sabina, \$40,000.

**Duncan, Okla.**—The city is planning a new city hall to cost about \$6,000.—Chas. E. Murphy, Mayor.

**McAlester, Okla.**—The city has voted to issue bonds for erection of a jail building.—G. M. Chany, Mayor.

**Purcell, Okla.**—Bonds to the amount of \$62,000 have been voted for a new City Hall to be erected.—M. S. Robertson, City Clerk.

**Tulsa, Okla.**—No site has yet been selected for the proposed Federal building for this city.

**Ambridge, Pa.**—The School Board has awarded a contract for the erection of a new school building to L. C. Kirker & Son, Beaver Falls. Structure will be of brick.

**Carbondale, Pa.**—Preliminary arrangements are being made for surveys to be made on site of the proposed new Post-office building in this city.

**Cardington, Pa.**—Henry L. Reinhold, 1004 Chestnut street, Philadelphia, Pa., prepared plans for a new school for the Board of Education of Upper Darby Township.—Address Wm. Watkins.

**Hays, Pa.**—The members of the Borough School Board are discussing plans for the erection of a new school building and the remodeling of the Blackburn School.

**New Castle, Pa.**—A contract has been let to the Glen Manufacturing Company, of Elwood, for 16 fire escapes for school buildings for \$1,797.74. The American Warming and Ventilating Company was given repair work to the amount of \$142; the Bryson Plumbing Company for \$1,283, according to the specifications of architect, W. G. Eckles.

**Pittsburg, Pa.**—Mayor Guthrie has awarded a contract to Wm. Kerr's Sons Company for making over the former Allegheny City Hall into a central police station for the north side, at their bid of \$15,200.

J. L. Beatty, architect, 146 Sixth street, Pittsburg, is preparing plans for a hospital building, a power house and a nurses' dormitory to be built by the West Pennsylvania Hospital Association. The buildings will have an irregular shape, about 225x320 feet and will be fireproof. They will have three, four and six stories and will cost about \$600,000. Bids will be received in about two months.

**Palmerton, Pa.**—Lewis Praetorius has con-

tract for a brick school building in Lower Townshenship, to cost \$17,000. Plans are by Architect N. Blunt, Allentown.

**Philadelphia, Pa.**—City Architect Bleddyn Powell has plans for the erection of a new police station at northwest corner of Oxford and Nineteenth streets. Structure will be two stories, 122x83 feet.

**Reading, Pa.**—Plans for the new armory to be erected at Rose and Walnut streets have been received in the office of the Building Inspector, City Hall, for approval. The building will be two stories high with a basement with a 12 foot gallery surrounding. Its dimensions will be 60x101 feet. The structure will be of iron and brick. The plans have been O. K'd except the depth of the girders are to be increased.

**Wilkesbarre, Pa.**—The plans of Architect Owen McGlynn, Simon Long building, were accepted for the fireproof four-story and basement high school building, 144x214 feet. Roman renaissance style, steel frame, Indiana limestone, art and polished plate glass, fireproof vaults, marble wainscoting, water closets, lavatories, etc. Cost, \$300,000.

**York, Pa.**—Company clerk, Wilbur C. Kraber, of Company A. N. G. P., is authority for the statement that the company will have a fine new armory building.

**Aberdeen, S. D.**—Plans are being prepared for the erection of a new City Hall and bids will shortly be advertised for.

**Nashville, Tenn.**—Work has been started on the New Walter Stokes School on Waverly place, to cost about \$5,000.

**Canadian, Tex.**—The Attorney General has approved of an issue of \$35,000 Hemphill county court house bonds.—Address County Judge.

**Mineral Wells, Tex.**—A site on Mesquite street has been offered for location of proposed Federal building.

**Palestine, Tex.**—City Engineer Merrick will make surveys on site on the new Government postoffice building in this town. The cost of structure will be \$75,000.

**San Marcos, Tex.**—Force of workmen are tearing down old courthouse building preparatory to the erection of a new building.

**Charlotte C. H., Va.**—A new school is to be erected, to cost about \$7,000. New high school is also proposed at Drake's Branch; cost, \$6,500.

**Montpelier, Vt.**—Work will probably be started this fall on erection of a new City Hall. Plans are by Architect Adams.

**Tacoma, Wash.**—W. H. Maxwell, of Spokane, has contract for the erection of the Federal building in this city, to be located on A street. The cost will be \$400,000.

**Milwaukee, Wis.**—D. Crane, 91 Wisconsin street, has prepared plans for a new school on Grand avenue.

A new addition is proposed to the City Hall.

**Newberry, Wis.**—Plans have been prepared by Architects Charlson & Kuenzli, Milwaukee, for erection of a school building. Contracts will be shortly let.

**Radisson, Wis.**—Six thousand dollars in bonds has been authorized by vote for the erection of school building.

**Racine, Wis.**—City Engineer P. H. Connolly has prepared plans for remodeling the City Hall.

**Welland, Ont.**—Plans and specifications for the erection of the new customs and post-office buildings are about completed and contracts for the work will shortly be let.

**Mount Forest, Ont.**—Sum of \$5,000 has been granted by Dominion Government for purpose of building a postoffice.

## ELECTRIC RAILWAYS

**Fresno, Cal.**—The Board of Trustees of this city at its last regular meeting, August 3, passed a resolution declaring its intention of installing a street lighting system in the business section. The district includes approximately twenty blocks. The proposed improvement is to be taken up under a State law which will be found recorded on page 564 of the Statutes and Amendments to the Codes of 1905, entitled, "An Act to provide for the lighting of public streets, lanes, alleys, courts and places in municipalities, and for the assessment of the costs and benefits thereof upon the property benefited by."—T. E. Crane, City Expert.

**Los Angeles, Cal.**—M. J. Nolan has applied for a franchise for an electric railway on West Washington street from LaSalle avenue to the west city boundary, and from thence west to Rimpau, a distance of 1½ miles. The line will be an extension of the Huntington system.

**Oakland, Cal.**—Board of Supervisors have declared provisionally to grant permission to A. W. Maltby and Joseph Naphitaly to operate an electric street railway through the Alameda tunnel which leads into Contra Costa county.

**San Bernardino, Cal.**—Residents of F and Seventh streets are considering organizing a company to build an electric railroad from F and Third streets to Seventh street and west to Mt. Vernon avenue.

**Harlan, Ia.**—Shelby County Interurban Association has been organized to make two surveys from Harlan to the county line for an interurban line. C. D. Booth, Secretary.

**Grangeville, Idaho.**—Several mining companies operating in the Elk City district have subscribed \$200,000 for the construction of an electric road from Grangeville to Elk. The proposed line will be 35 miles long. Excellent grades have been found. The line will extend to within ten miles of Buffalo Hump and will serve the Four Mile, Six Mile, Orogrande and Elk districts. Power will be available from the South Fork of the Clearwater and its tributaries.

**Bluffton, Ind.**—B. A. Batson, C.E., Bluffton, is making surveys for a proposed electric railway to run between Bluffton, Berne and Celina.

**Hutchinson, Kan.**—W. E. Hutchinson, President of the local Water, Light and Gas Company, is promoting a project for the construction of a 60-mile interurban line.

**Iola, Kan.**—The Iola Electric Railway, which operates a local car line and an interurban line to Gas City, LaHarpe and Concreto, will be taken over in September by the Kansas Southern Electric Line, of which F. V. Crouch is President. The line will be immediately extended to Humboldt, nine miles south, and from there to Pittsburg.

**Lawrence, Kan.**—Whit Laming, Lawrence, according to reports, has asked franchise for construction of an electric street railway line.

**Grand Rapids, Mich.**—Grend Rapids, Hastings and Battle Creek Interurban Railway Company is raising funds to complete the preliminary work and to make a survey for the proposed branch line from Irving to Gunn Lake and Kalamazoo and to start construction of the main line from Battle Creek to Hastings. John E. More is interested.

**Salem, O.**—Surveys have been made and options on right of way are being secured for a proposed electric railway from Salem to Youngstown, via Lanterman's Falls. Peter McCave, Gettysburg, O., is promoting the project.

**Chester, Pa.**—At a meeting of the directors of the proposed trolley line between West Chester and Pottstown, recently, it was decided to construct and equip the road, at a probable cost of \$600,000. The contract for constructing the railway was awarded to Charles F. Goldstrom, of Pittsburg. Rails and other materials will be shipped to White-land station, at which point work will be started.

**Brookings, S. D.**—The City Council has granted the Brookings and Sioux Falls Electric Railway Company a franchise to construct a line through certain streets.

**Mt. Pleasant, Tex.**—A street railway four miles in length will be constructed. Gasoline motor cars will be used.

**Sherman, Tex.**—The Sherman-Dallas Interurban Railroad has purchased the Texas Southern Railroad, a short line from Winnsboro to Marshall.

**Roanoke, Va.**—The Roanoke Traction and Light Company has been chartered to build an electric railway connecting Roanoke, Clifton Forge, Lynchburg and other points in Virginia, altogether about 200 miles of line; capital stock, \$2,000,000. James P. Woods, President; James C. Martin, Secretary.

**Bellingham, Wash.**—Nooksack Valley Traction and Railway Company, of Bellingham, has been incorporated. Capital stock is \$1,250,000. W. P. Alward, J. S. Wheeler, J. E. Morrison, Edward Brown, W. H. Jarrett and J. William Welch are interested. The company proposes to build a line of railway from a point at or near Bellingham to a point in or near the city of Blaine and from said point at or near Bellingham to a point in or near Sumas, for the carrying of passengers and freight. Surveys for the road are now under way.

**Oshkosh, Wis.**—Oliver C. Fuller and Fred C. Bert, of Milwaukee, have purchased all the property and rights of the Winnebago Traction Company. The purchase price was \$950,000 and the property purchased includes the franchises, easements, right, real estate, tracks, rolling stock, power plant and all other equipment. It is the purpose to reorganize the Winnebago Traction Company with Clement C. Smith, of Milwaukee, as President. The extension of the Omro interurban line to Berlin is practically assured. The Oshkosh lines will be overhauled and repaired. J. P. Pulliam, the present Superintendent of the traction company, will remain in charge as active manager.

## BRIDGES

**Locksburg, Ark.**—Four new bridges are to be built for Servir county.—A. C. Steel, County Judge.

**San Bernardino, Cal.**—The City Engineer has been instructed to prepare plans and specifications for the construction of several bridges.

**Florence, Colo.**—Officials of the city of Florence and Fremont county have perfected plans for the construction of several bridges

to replace those carried away by floods. A substantial concrete structure will be built on Second street and a smaller one will be constructed across Oak creek on Third street. The east approaches on bridges will be put in by the city of Florence, while the approaches on the opposite side will be put in at the expense of the county.

**Sioux City, Ia.**—City Council is considering making temporary repairs to a number of bridges over Perry and Bacon creeks. City Engineer Skeels estimates that it will cost \$20,000 to repair the Bacon creek bridges.

**Joliet, Ill.**—The Board of Highway Commissioners instructed its Secretary to advertise for bids for replacing abutments of the Venton street bridge.

**Columbus, Ind.**—The Board of Commissioners will soon ask for bids for the repair of the iron work and reflooring of the white River bridge, which is 525 feet in length.

**Fort Wayne, Ind.**—County Commissioners have been petitioned to construct bridge at Prospect avenue, connecting Spy Run and Lakeside.

**Logansport, Ind.**—Joseph Vernon, Engineer, estimated cost of raising the Davis bridge and placing an overhead bridge in over the Vandalia tracks at \$24,815.

**Lawrence, Kan.**—Plans have been prepared for building five steel bridges in Douglas county.—Francis A. Kerne, County Auditor.

**Frankfort, Ky.**—At the next session of the State Legislature an appropriation of \$100,000 will be asked for building a bridge over the Kentucky River at Capitol avenue.

**Shreveport, La.**—Plans are being prepared for a bridge to be erected over Red River at this city.

**Malden, Mass.**—Special Commission has reported in favor of constructing steel bridge as a means of solving the grade crossing problem at Pleasant street. The estimated cost is \$200,000 and it is expected that the Boston and Maine Railroad will pay 65 per cent. of the cost. The report will be submitted to the State Railroad Commission for approval. J. P. Snow, Boston, Mass., is Bridge Engineer, B. & M. R. R.

**Grand Rapids, Mich.**—L. W. Anderson, City Engineer, has plans under way for a reinforced concrete viaduct to be constructed from Commerce street to Grandville avenue, over the railroad tracks at Wealthy avenue.

**Muskegon, Mich.**—County Supervisors are to ask Congress for permission to erect a bridge, without draws, over the Muskegon River on the North Muskegon Road.

**Pine City, Minn.**—County Commissioners are to aid village of Banning in building a \$3,000 steel bridge over Kettle River.

**Saint Peter, Minn.**—County Commissioners have authorized the Board of Supervisors of West Newton to expend that town's apportionment for the improvement of the Fort Ridgely Road in building a steel bridge.

**Jefferson, Mo.**—The County Board has been petitioned for a bridge to be built across Sanford creek near Lisletown. A subscription donation of \$570 accompanied the petition. The court accepted and filed the petition and the matter will be taken up in the September meeting of the court. The bridge will no doubt be built.

**Kansas City, Mo.**—Missouri Pacific Railway is to build a 600-foot bridge over the Kaw River, the bridge to be completed by October 10, 1909. E. F. Mitchell, St. Louis, Mo., is Engineer of Construction, Missouri Pacific Railway.

**Springfield, Mo.**—Harry G. Horton, City Engineer, has completed specifications for concrete bridges to be constructed over the Jordan at Boonville and Main streets. The improvements will cost from \$10,000 to \$11,000.

**Red Lodge, Mont.**—Commissioners of Carbon and Yellowstone counties will erect jointly a \$20,000 bridge over the Yellowstone River at Columbus.

**Great Falls, Mont.**—B. D. Whitten, County Surveyor, has about completed plans for new steel bridge to cost \$10,000, to be erected over Deep Creek at Truly. Bridge will be 243 feet long and will rest on caissons filled with concrete. County is also to erect a 60-foot span steel bridge over Hound Creek, and an 80-foot steel bridge over Sun River.

**Missoula, Mont.**—Taxpayers of Missoula County have authorized the construction by the County Commissioners of a \$125,000 bridge over the Missouri River at Higgins avenue, Missoula.

**Newark, N. J.**—County Freeholders have decided to erect a bridge over the Passaic River at Elwood avenue.

**Durham, N. C.**—City and Norfolk and Western Railway Company, J. E. Crawford, Bridge Engineer, Roanoke, Va., are to erect steel bridge over railroad tracks in North Durham.

**Hamilton, O.**—County Commissioners will take up matter of constructing new hoist bridge over M. and E. canal at East High street.

**Piqua, O.**—City Engineer Whitlock is preparing plans for concrete bridge over the hydraulic at Fountain Park.

**Toledo, O.**—The Chief Engineer of the C.



H. & D. R. R. has notified the city that the company will build a bridge at once over the tracks on Fassett street.

**Sapulpa, Okla.**—County Commissioners have been petitioned to vote \$200,000 of bonds for constructing bridges.

**Williamsport, Pa.**—Viewers have reported in favor of constructing bridge over river between Montgomery Borough and Mauney Creek Township.

**Sturgis, S. D.**—County Commissioners have been petitioned to construct steel bridge over Belle Fourche River, and matter will be voted on at November election.

**Marlin, Tex.**—Walls county has voted \$50,000 in bonds to construct a bridge over the Brazos River at Belton Crossing and to repair High Bank bridge over the same river. John Wharton Maxey, Binz building, Houston, Tex., is Engineer.

**Hoquiam, Wash.**—The construction of a steel bridge over the Hoquiam River, to cost about \$75,000, is contemplated.

**Spokane, Wash.**—Special election to authorize an additional issue of \$500,000 worth of bonds for concrete bridge building will probably be held in this city Sept. 8. J. C. Ralston is City Engineer.

**Green Bay, Wis.**—September 1 an election will be held to decide the question of issuing \$50,000 in bonds for the construction of bridge.—City Clerk.

## MISCELLANEOUS

**Graymont, Ala.**—The citizens have authorized an issue of \$30,000 school bonds and \$10,000 sewer bonds.—W. A. Lester, Mayor.

**San Francisco, Cal.**—The city is having surveys made of the land recently purchased at Thirteenth and Fourteenth avenues from Golden Gate to the Presidio reservation for the purpose of extending Golden Gate Park.

**Ashburn, Ga.**—August 12 bids will be received for the purchase of \$55,000 5 per cent. water, light and school bonds.—John J. Story, City Clerk.

**Macon, Ga.**—City officials are considering the matter of erecting a crematory.—Address Health Department.

**St. Paul, Minn.**—August 20 bids will be received for the purchase of \$50,000 4 per cent. 20-year park bonds.—Lewis Betz, City Comptroller.

**Jersey City, N. J.**—About \$68,500 will be expended in improving Mary Benson Park and J. Leonard Gordon Park.

**Little Falls, N. Y.**—At a recent meeting of the Board of Aldermen, J. D. Frederickson spoke in favor of a public playground for the boys.

**Rochester, N. Y.**—The petition is being considered for improvements to be made to park proposed in the Twenty-second ward.—Address Alderman Schafer, of that ward.

**Schenectady, N. Y.**—Mayor Van Voast favors property in McClellan street for a public park for this city.

**Syracuse, N. Y.**—A meeting of Park Commissioners was recently held to discuss plans for converting the swamp adjacent to Frazer School into a public playground.

**Akron, O.**—The Board of Health is considering the construction of a garbage disposal plant.

**Cleveland, O.**—The Board of Public Service is considering property in the vicinity of Kinsman avenue as a probable site for a playground.

**Oakley, O.**—September 8 bids will be received for the purchase of \$5,883, one to ten years, 5 per cent. village bonds.—Address Oscar Kosche, Clerk.

**Oxford, O.**—August 31 bids will be received for the purchase of \$50,000 village bonds, payable in the years 1935 to 1951 inclusive, interest 4½ per cent.—D. P. Beaton, Village Clerk.

**Toledo, O.**—Henry Wagner, of Cincinnati, has been examining the garbage reduction plant with a view to organizing a company to resume operation. The plant was sold at a sheriff sale for \$14,000, although its original cost was \$100,000.

**Youngstown, O.**—August 31 bids will be received for the purchase of the following bonds: \$4,600 sidewalk bonds, interest 4½ per cent.; \$2,500 sewer bonds, interest 4½ per cent.—Wm. L. Davies, City Auditor.

**Miami, Okla.**—The city has voted to issue \$50,000 in bonds for school, sewer and jail purposes.

**Erie, Pa.**—A committee of Councilmen have been visiting Cleveland, O., to look over the garbage disposal system with a view to establishing a plant in Erie. The members of the committee were Health Officer J. W. Wright and Councilmen Yake, Lynch and Kneib.

**Philadelphia, Pa.**—A 14-acre site on Cresco avenue has been selected for a new park.

City has taken title to property at Fifty-ninth street and Thomas avenue to be used as a city park.

**Pittsburg, Pa.**—Bids were opened for printing a thousand copies of the digest of the

City Hall ordinances. The bids ranged from \$1.35 to \$2.75 a page, including binding in half sheet.

**Scranton, Pa.**—It is probable that the contract for the erection of the garbage plant will shortly be let.

**Cranston, R. I.**—Council has appropriated \$300 for a pumping outfit to spray the elm trees.

**Park City, Tenn.**—The citizens have voted to issue bonds for \$105,000.

**Spokane, Wash.**—The city is considering the matter of establishing a park between Boone street on the south, Mission avenue on the north, Belt street on the east and Chestnut street on the west.

## BIDS RECEIVED

**Odenville, Ala.**—Bearden Bros. & King, of Birmingham, have been awarded the contract for a new high school, to be erected; cost, about \$100,000.

**Conway, Ark.**—The Moravia Construction Company has been awarded the contract for constructing five steel bridges at \$6,720.—James A. Lea, County Judge.

**Los Angeles, Cal.**—All bids received by the Board of Public Works for the construction of the J. W. Bone division of the Los Angeles aqueduct have been rejected and the city will do the work by direct employment of labor. The estimate of Chief Engineer Wm. Mulholland was \$1,956,578. The bids received were as follows: Atlantic Gulf and Pacific company, Section 1 \$637,643.60, Section 2 \$1,225,173.10, Section 3 \$1,133,149, total \$2,995,965.70, extra work at cost less 15 per cent.; McArthur Brothers, (1) \$796,127.50, (2) \$1,041,323, (3) \$1,039,120, total \$2,876,570.50, extra work cost plus 10 per cent.; John Moran, (1) \$623,525.24, (2) \$876,570.90, (3) \$794,105.50, total \$2,294,201.64, extra work cost plus 10 per cent.; A. Bent, (1) \$601,135.25, extra work cost plus 10 per cent.; Robt. Sherer, (1) \$535,106, (2) \$939,894, (3) \$882,828, total \$2,357,828, extra work cost plus 15 per cent.; Mahoney Brothers, (1) \$779,375, extra work cost plus 15 per cent.; T. J. Moran, (1) \$1,252,764.05, (2) \$1,425,224.38, (3) \$1,579,570, total \$4,257,558.43, extra work cost plus 15 per cent.

**Pierce, Col.**—W. H. & W. Pierce, Grover, have the contract for constructing two Yerby irrigation system ditches near Pierce, 2 to 6 miles long, at a cost of about \$15,000.

**Voluntown, Conn.**—Amos Bridge's Sons, Inc., Enfield, have the contract, at \$3,620.75, for grading two sections in the town of Voluntown.—Jas. H. Macdonald, State Highway Commissioner.

**Washington, D. C.**—Elliott Woods, Superintendent of the U. S. Capitol Building and Grounds, Washington, D. C., has awarded contract for the electric lighting fixtures for the new Senate Office Building to the Mitchell Vance Co., 507 West Twenty-fourth street, New York, at \$35,521.

The Isthmian Canal Commission has awarded the American Car and Foundry Company the contract for furnishing 300 box cars for use in the isthmian canal work. Their bid was \$993 a car.

The Commission has also awarded to the Du Pont Powder Company the contract for supplying \$8,270,000 pounds of dynamite and a large number of dynamite electric fuses, their bid being \$977,525 for all.

**Jacksonville, Fla.**—The Georgia Engineering Company have been awarded a contract for paving 15,200 square yards of vitrified blocks at \$1.515 per square yard on Myrtle avenue and Fourth street.—Philip Proileau, City Engineer.

**Pensacola, Fla.**—The Escambia County Commissioners contemplate constructing three bridges in connection with the road improvements to span the Perdido River, Bayou Chico and Escambia River.

**Alton, Ill.**—The following bids were received by Jas. Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C., for the construction of the U. S. Post Office, at Alton: W. B. McAlpin, Dickson, Ill., \$54,000; Barnes Bros., Hamilton, O., \$53,300; F. M. Rood & Co., Tipton, Ind., \$54,470; W. W. Luyster, Dayton, O., \$60,000; Globe Construction Company, St. Louis, Mo., \$60,945; C. L. Gray Construction Company, St. Louis, Mo., \$53,534; J. J. Weullner & Son, Alton, \$64,385; Kellerman Construction Company, St. Louis, \$65,000; Hiram Lloyd Building & Construction Company, St. Louis, \$56,738; George Stagil, St. Louis, \$75,000; S. L. Jones Building Company, St. Louis, \$56,940.

**Aurora, Ill.**—The McCarty Improvement Company, Davenport, Ia., was the lowest bidder, at \$24,540.50, for paving with brick and for cement curbing, on Spruce street, from Lake to May street, Aurora.

**Braceville, Ill.**—C. B. Conner was awarded the contract, at \$3,186, for the erection of a village building.—R. J. Moffatt, Village Clerk; H. Boehme, Architect, Joliet, Ill.

**Chicago, Ill.**—The contract for wrecking the old City Hall and putting in the caissons for the new one has been awarded to William J. Newman, the lowest bidder. Under the

contract Mr. Newman will have to put in twelve more caissons than did Sebastian Krug, who had the county building contract, and he will get \$22,000 less for doing it. At the figure of \$324,975 for doing the work within 240 days it is believed that Mr. Newman can make a good profit, because of the comparatively low prices for material which now prevail.

**Joliet, Ill.**—The Board of Local Improvements let contracts to the Ross & Curtis Stone Company for paving with brick East-erly and Westerly alley.

**Peoria, Ill.**—The Board of Commissioners of Highways of the town of Millbrook and the Special Committee of the County Board awarded contract to the Clinton Bridge & Iron Works, Clinton, Ia., at \$2,995, for the construction of a steel and iron bridge over Spoon River on the highway leading from Elmore to Victoria.

**Waukegan, Ill.**—The Board of Local Improvements let contract to James Cape & Sons, Racine, Wis., for four blocks of paving on Clayton street and three blocks on Madison street; also let contract to Thomson & Smart, Waukegan, for sidewalk and retaining wall on Madison street.—Fred W. Churchill, Secretary.

**Boonville, Ind.**—The City Council of Boonville held a special session to receive bids on the South sewer, which will be constructed within the next year. Seven bids were filed with City Clerk A. J. Betteiger and were opened and considered by the Council. The firms represented were Roetzel & Chipman, of Boonville, concrete sewer \$17,494.50, brick \$47,474; H. G. Roetzel, of Boonville, concrete \$52,841, brick \$52,012; Charles Pelzer, of Boonville, concrete \$57,242.90, brick \$56,160.70; Foulkes & Forbes, of Terre Haute, concrete \$42,460.90, brick \$47,160.70; J. J. Dunnigan, of Shennendoah, Ia., concrete \$55,656.90, brick \$57,264.90; the Newman Sewer Company, of Evansville, concrete \$54,190.94, brick \$54,560.40, and W. C. Sweeney of New Albany, concrete \$55,256.20, brick \$57,629.70.

**Evansville, Ind.**—The Anchor Paving Company has been awarded a contract for laying concrete sidewalks 10 feet wide on Main street, between Division and Columbia streets, for \$3,612.56.

**Laporte, Ind.**—Architects Foltz & Parker, Indianapolis, let contracts for a two-story jail building for the Laporte County Commissioners, Laporte; \$70,000.

**New Albany, Ind.**—At the meeting of the Board of Public Works the contract for the improvement of Tenth street, from Spring to Oak, and for the sidewalks on Fifteenth street, from Spring to Elm, were awarded the Jefferson County Construction Company. But one other bid was received, and it was presented by W. O. Sweeney, contractor for the improvement of West Main street. The bid for the East Tenth street improvement, made by the Jefferson County Construction Company, was \$4.51 a lineal foot for Peebles' standard block; \$4.32 for Peebles' red paver, and \$4.30 with Hoosier block. The bid of Mr. Sweeney was \$4.73 a lineal foot for either Carlyle or Hoosier block. For the Fifteenth street improvement the Jefferson County Construction Company's bid was \$1.87 a lineal foot for Peebles' red paver and \$1.83 for Hoosier block. Sweeney's bid was \$1.89 for either Carlyle or Hoosier block. Tenth street is to be completed within ninety days and Fifteenth street within sixty days.

Twenty-fourth street improvement consists of a twenty-four-foot roadway, with curb, six-foot sidewalks and grass plat between the sidewalk and the property line. The Fifteenth street improvement calls for a grass curb and gutter, six-foot sidewalks and grass plat, but does not include the improvement of the roadway. The bids do not include the cost of the intersections of streets and alleys, which are to be charged extra, proportionately along the line of the improvement, and will increase the cost about 20 cents a lineal foot.

**Washington, Ind.**—Noah Bogard has been awarded the contract for the construction of several thousand feet of concrete sidewalks in new additions. His bid was \$1,908.96. Warren Routt, local bidder, also was awarded the contract for the building of concrete curbs and gutters on three city streets to be improved with gravel. The contract price is \$2,577.

**Windfall, Ind.**—The Commissioners of the County have awarded contracts for the construction of seventeen free gravel roads under the new three-mile gravel road law. Madison township gets five roads, at a cost of \$17,718.30; Liberty township, eleven roads, \$35,255; Jefferson township, one road, \$1, and Cicero township, one road, \$7,289. There were seventy-eight bids filed. The successful bidders were: Charles Kinder, Porter & Bowlin, J. F. Morris, Duncan & Hodson, C. V. Todd, Edward Becker, C. M. King, John Kleyla, Henry Roller and B. W. Goff.

**Cherokee, Ia.**—Swanson & Bettsworth, Cherokee, have been awarded a contract for furnishing twenty tons of 4-inch cast-iron pipe at \$27.50, 375 feet of 2-inch galvanized

pipe at \$15.75 per hundred feet; for laying 1,900 feet of 4-inch pipe in a 6-foot trench, 24 cents; for laying 375 feet of 2-inch pipe in a 6-foot trench, 17 cents.

**Davenport, Ia.**—The McCarthy Improvement Company of Davenport filed the lowest bid and will be awarded the contract for paving Third street, from Iowa to Warren streets. The City Engineer estimates that the total cost of the work will be \$58,354.88, and of this amount the Tri-City Railway Company will have to pay approximately \$17,857.90. W. H. McGovern Company: Excavation, 44 cents; asphalt, \$1.95; concrete, sand and brick paving between tracks, \$2; combined concrete curb and gutter, 44 cents; old curbing reset, 15 cents. J. F. Hill: Excavation, 45 cents; concrete and paving with asphalt, \$2.05; concrete, sand, and brick paving between tracks, \$1.98; concrete gutter, 47 cents; and curbing reset, 22 cents. Bryant-Ford-McLaughlin Asphalt Paving Company: Excavation, 15 cents; concrete and paving with asphalt, \$1.95; concrete, sand and brick paving between tracks, \$1.95; gutter, 39 cents; curbing reset, 12½ cents. McCarthy Improvement Company: Excavation, 40 cents; concrete and paving with asphalt, \$1.85; concrete, sand and brick paving between tracks, \$1.85; concrete gutter, 40 cents; old curbing reset, 11 cents.

**Des Moines, Ia.**—A contract has been let to the J. W. Turner Improvement Company for the construction of 2,000 feet of new sewer.

**Mason City, Ia.**—We are officially advised that the Farmers' Co-operative Brick & Tile Company, of Mason City, Ia., have let the contract to the Minneapolis Steel and Machinery Company, 2854 Minnehaha avenue, Minneapolis, Minn., for their complete power plant, including 20x48-inch heavy duty twin Corliss engine, three 72-inch x 18 feet horizontal return tubular boilers, 500-h.p. feed water heater and triplex feed pump.

**Templeton, Ia.**—The Katz-Craig Contracting Company, 850 and 851 Brandies Building, Omaha, Neb., has been awarded the contract, at \$6,048, for constructing the waterworks system here.—M. J. Daeges, Town Clerk.

**Lawrence, Kan.**—Associate Architects Fred C. Gunn, Kansas City, and W. T. Wellman, Lawrence, let contract for a two-story jail building for Douglas County, A. Frank Kerns, County Clerk, \$25,000.

**New Orleans, La.**—The New Orleans Gas Light Company has awarded contract to the Stacey Manufacturing Company, Cincinnati, O., for construction of 4-lift 1,020,000 cubic feet gas holder and tank for storing gas; cost, including foundation, complete, \$125,000.—Joseph H. DeGrange, Secretary.

**Portland, Me.**—Bids have been opened at the Treasury Department, Washington, D. C., for the construction of the new Court House at Portland, Me., to be completed May 31, 1910, as follows: Woodbury & Leighton, Boston, \$169,838; F. W. Cunningham & Sons, Portland, Me., \$177,424; W. H. Fissell & Co., New York, \$171,300; Ambrose B. Stannard, New York, \$178,000; Smith & Rumery, Portland, \$170,500; John Pierce Company, New York, \$173,300; the Connors Brothers Company, Lowell, Mass., \$169,975.

**Boston, Mass.**—Architects Stickney & Austin let contract to W. A. & H. A. Root for a police and comfort station at Middlesex Fells, for the Metropolitan Park Commission.

**Lansing, Mich.**—Thomas Fisher has been awarded the contract at \$3,868 for constructing a sewer in Cass street and Drury lane.

**Marshall, Mich.**—O. J. Reniger has the contract, at \$6,400, for the construction of a reinforced concrete bridge across the Kalamazoo River, at South Marshall avenue.

**Menominee, Mich.**—Jacobson & De Guere, Grand Rapids, Mich., have secured contract for plans, specifications and supervision of a 7,000-h.p. hydro-electric power plant for the company to be located at Grand Rapids, on the Menominee River, about 18 miles north of Menominee, for the Menominee & Marinette Traction Company. The plans call for a solid concrete dam about 500 feet long, a dike of 1,000 long, a reinforced concrete power-house and flume, a canal on the opposite side of the river leading to the power-house about 4,000 feet long.

**Painesdale, Mich.**—Herman Gundlack, of Houghton, has contract for a new school, to be brick, 176x80 feet, and large and modern in every detail.

**Albert Lea, Minn.**—The Freeborn County Commissioners, have let contract to Millgren, Boyce & Coffin, Dubuque, Ia., for ditch No. 17, 43.62½ cubic yards.—C. E. Brainerd, County Auditor.

**Alexandria, Minn.**—The contract for reconstructing the electric light and water plant and system has been awarded to J. G. Robertson, 29 Gillfillan street, St. Paul, for \$22,591, not including stokers and pole line.—Edwin P. Burch, Guaranty Building, Minneapolis, is Engineer.

**Austin, Minn.**—The Mower County Commissioners have let contract to the Hennepin Bridge Company for a steel bridge, with

two 105-foot spans.—George Albertson, County Auditor.

**Buhl, Minn.**—The contract for improvements to the municipal electric light plant and water works system has been awarded to R. H. Whiteacre & Co., of St. Paul, Minn.

**Elgin, Minn.**—The contract for furnishing a 70,000-gallon steel water tower and cast-iron water mains has been let by the city to the National Construction Company, of South Bend, Ind.—Loweth & Wolff, St. Paul, Minn., Consulting Engineers.

**St. Paul, Minn.**—The Board of Public Works awarded contract to D. W. Moore at \$6,997 for grading Augusta street, from Bidwell to South Robert street, and Gorman avenue, from Augusta to Tyler street, and Tyler street, from South Robert to Goff avenue.

**Newton, Miss.**—The contract for the construction of the sewerage system here has been awarded to Sullivan & Long, of Canton, Miss., at \$3,836.—Xavier A. Kramer, Engineer, Magnolia, Miss.

**Pinola, Miss.**—The Converse Bridge Company, Chattanooga, Tenn., has been awarded the contract for the construction of a steel bridge over the Stang River, at \$4,283.

**Weatherby, Miss.**—The contract for the construction of a steel bridge over the Pearl River at Mahoff's ferry has been awarded to the Converse Bridge Company, of Chattanooga, Tenn., at \$3,362.

**Palmyra, Mo.**—Architect M. S. Martin, Hannibal, let general contract to the Burlington Lumber Company, Palmyra, for a two-story school building for the Board of Education, Palmyra; \$10,000.

**Anaconda, Mont.**—Thomas Kelly, Anaconda, has been awarded the contract at \$4,702, for constructing two sewers.

**Anacortes, Mont.**—Bids for the construction of two sewers in the eastern part of the city were opened. One of these sewers is a branch sewer being built by the city, and the other is a lateral, for which the city is to pay 25 per cent. of the cost of construction, the remainder to be paid by the property owners benefited. For the branch sewer Thomas Kelly, of Anaconda, bid \$3,126; R. M. Bardsden, of Butte, bid \$3,450. For the other sewer Thomas Kelly, of Anaconda, bid \$1,575; R. M. Bardsden, of Butte, bid \$1,660. Both contracts were awarded to Mr. Kelly.

**Dillon, Mont.**—Sewer contracts were let recently as follows: John Kent, Dillon, for construction of sewer in District No. 4, \$2,631.77; Peter Orem, Butte, construction of sewer in District No. 3, \$3,433.77.

**Sidney, Neb.**—The contract for the new water works system has been let to the Des Moines Iron and Structural Company at \$18,750, to be completed by December 1.

**Hackensack, N. J.**—The B. M. Shanley Company, 26 Exchange place, Jersey City, N. J., has been awarded the contract, at \$148,700, for macadamizing the Paterson plank road, from the Carlstadt Depot to the Hackensack River.

**Sayreville, N. J.**—Chas. Els of this place has contract for a new school to be erected for the Board of Education, to be after plans by George K. Parsell, to be modern in every detail.

**Trenton, N. J.**—Bids were received from the following for the construction of sewer No. 408 on Princeton avenue: Thomas J. McGovern, Israel Billingham, Gibbs & Morgan, Antonio Di Lucia and Giuseppe Boscarelli. The proposals were referred to the sanitary committee.

**Albany, N. Y.**—The Sewer Committee opened the bids for putting down the proposed sewer on Prospect street, from Broadway to Carter street, and P. & J. F. O'Rourke were found to have presented the lowest bid. This firm agreed to do the work for \$1.23 a running foot, with \$1.45 extra for rock and \$84 for manholes. The sewer will be about 1,200 feet long and will cost approximately \$1,500.

Bids were also received for grading Van Ness street between City Terrace and Lutheran street to the established line. Matthew Gahran offered to do the work for \$318, and this being the lowest of the bids received the committee will report in favor of giving him the contract.

**Albany, N. Y.**—F. C. Stevens, State Superintendent of Public Works, opened bids for barge canal contract No. 31, which includes the improvement of the Erie Canal at Little Falls, the modification of the dam and the construction of guard gates at Rocky Rift. There were five bids received. The bid of Casey & Murray, of Rochester, whose offer totals \$829,770, is the lowest. The names of the other bidders, with the amounts of bids as based on the engineers' estimate of quantities, are: Fidelity Construction Company, Detroit, \$837,889; Coast and Interior Construction Company, Fayetteville, Ind., \$881,318; the John Pierce Company, New York, \$864,655; Williams Engineering and Construction Company, New York, \$850,594.

**Ballston, Spa, N. Y.**—The Board of Trustees awarded contract to Timothy D. Sullivan, of this place, for construction of the High street sewer.

**Bronxville, N. Y.**—Frank Cestone, of White Plains, N. Y., has been awarded the contract for constructing sewers in Bronxville, at \$4,112.—G. H. Rogers, Village Engineer, Tuckahoe.

**Brooklyn, N. Y.**—Bids were received on Aug. 5 by Bird S. Coler, Borough President, for constructing sewers in Scott avenue, from Newtown Creek, north of Metropolitan avenue, etc., Section 2. The Engineer's preliminary estimate of total cost for the completed work is to be taken as the 100 per cent. basis for bidding, proposals stating a single percentage of such 100 per cent. cost, such as 95 per cent, 100 per cent, or 105 per cent., for which all material and work called for in the contract and the invitation to bidders is to be furnished to the city. Such percentage, as bid, apply to all unit items specified in the Engineer's preliminary estimate, to an amount necessary to complete the work described in the contract. The bidders were: James Kelly, Brooklyn, N. Y., 87 per cent.; Rogers & Haggerty, 298 Gold street, Brooklyn, 94½ per cent.; Peace Brothers, Flushing, L. I., N. Y., 98.89 per cent.; J. H. Gray Company, Fuller Building, New York, 79.75 per cent.; Henry Newman, Scott avenue, Brooklyn, N. Y., 83 per cent.; Long Island Contracting and Supply Company, Long Island, L. I., N. Y., 92.07 per cent.; John I. Creem Company, 688 Greene avenue, Brooklyn, 86.99 per cent.

Harry A. Rutan was the lowest bidder, at \$19,950, for a one-story comfort station, at Wallabout Market, for the Department of Finance, Borough of Manhattan.

**Buffalo, N. Y.**—The following are the bids opened by the Board of Supervisors for the installation of an electric lighting plant at the Seventy-fourth Regiment Armory: Lazier Gas Engine Company, \$7,750; Riverside Gas Engine Company, \$7,400; Dubois Engine Company, 160-h.p., \$6,762; Bruce Marion-Abbott Company, engine complete, \$6,400; also three other bids by this company, \$6,903, \$6,620 and \$6,481; Robertson Electrical Construction Company, \$8,600; Fairbanks-Morse Company, complete with switchboard, \$7,500; A. H. Alberger Company, with switchboard, \$8,142; J. C. Stearns Electric Company, \$8,400, and Struthers-Wells Company (two bids), \$7,275 and \$7,125.

**Cohoes, N. Y.**—Geo. W. Kittredge, Chief Engineer New York Central Lines, Grand Central Station, New York City, awarded general contract to Tucker & Vinton, New York City, for erecting a 60-foot reinforced arch bridge, at Columbia street and New York Central tracks.

**Lyons, N. Y.**—The Board of Aldermen has awarded the contract to A. A. Bennett, 184 & Vicinus, 279 South avenue, Rochester, N. Y., for grading and macadamizing Catherine street.

**Newark, N. Y.**—The Village Board has awarded the contract to A. A. Bennett, 184 Jones street, Rochester, N. Y., for brick paving in South Main street, from Miller Union street.

**New York, N. Y.**—Contracts have been awarded as follows by George Cromwell, President Borough of Richmond, for regulating and repaving with vitrified brick on a concrete foundation the gutters of Lafayette, Sharp and Maple avenues and Elm street and Townsend avenue, to William J. Quinlan, Port Richmond, S. I., N. Y., at \$15,623; regulating and repaving with bituminous concrete on a concrete foundation New York avenue, Fingerboard road and Grant street; also on present macadam foundation, Washington, Swan and Second streets and Lafayette avenue, to include 2,520 square yards bituminous concrete pavement, maintenance of which the railroad company is responsible; 21,088 square yards bituminous concrete pavement with 5-year maintenance; 2,149 cubic yards concrete foundation; 12,260 linear feet of 16-inch bluestone curb; 184 cubic yards concrete girder for railroad tracks; 9,620 square feet of old sidewalk, relaid; 11,931 square yards old foundation, prepared, to John E. Donovan, of Port Richmond, at \$69,828; regulating and repaving with bituminous concrete on present foundation Henderson avenue, Broadway and Grove street, to include 20,768 square yards bituminous concrete pavement, with 5-year maintenance; 565 cubic yards concrete foundation; 10,050 linear feet of 16-inch bluestone curb; 75 cubic yards of reinforced concrete; 3,600 square feet of old sidewalk, relaid; 20,768 square yards old foundation, prepared, etc., to Uvalde Asphalt Paving Company, 1 Broadway, New York, at \$52,615; regulating and repaving with vitrified brick on a concrete foundation, gutters of Prospect, Britton and South streets and Van Pelt avenue, etc., to William J. Quinlan, at Port Richmond, at \$17,507; regulating and repaving with vitrified brick on concrete foundation the gutters of Seventh, Sixth, Fifth, Third, Second and First avenues, to Bonacci & Vincelli, 672 DeGraw street, Brooklyn, at \$19,732; regulating and repaving with vitrified brick on concrete foundation, the gutters of Grant, Clinton and Elizabeth streets, etc., to same, at \$18,423. List of bidders noted last week.

**New York, N. Y.**—Bids were received as



followed on Aug. 10 by Allen N. Spooner, Commissioner of Docks, for furnishing all the labor and materials required for repairing asphalt pavement on North and East Rivers, together with all work incidental thereto: (a) Class 1-A; (b) Class 2-A; (c) 1-B; (d) 2-B: Sicilian Asphalt Paving Company, 41 Park Row, New York, (a) \$1.95, (b) \$1.90, (c) \$2.07, (d) \$1.85; Continental Asphalt Paving Company, 42 Broadway, New York, (a) \$2.15, (b) \$2.15, (c) \$2, (d) \$2; Barber Asphalt Paving Company, 114 Liberty street, New York, (a) \$2.03, (b) \$2.03, (c) \$1.89, (d) \$1.89; Uvalde Asphalt Paving Company, 1 Broadway, New York, (a) \$2.02, (b) \$1.98, (c) \$1.90, (d) \$1.80.

**Oswego, N. Y.**—W. M. Spencer, County Supervisor, reports that contracts for erecting the county jail have been awarded as follows: Carpenter and masonry work to J. A. Calkin, of Oswego, for \$41,254; plumbing and electrical work to Thos. Hennessy, Oswego, for \$10,550, and prison work to Stewart Jail Works Company, of Cincinnati, for \$31,300.—William Beardsley, architect, Poughkeepsie.

**Phelps, N. Y.**—Deitz & Near, Canastota, N. Y., have been awarded contract for a ditch, 12 feet wide at surface, 7 feet deep and 5 feet wide at bottom, main ditch to be about 1½ miles in length with number of smaller tributary ditches; ditch to be constructed south of the town of Phelps.

**Port Chester, N. Y.**—Warren Bros., 93 Federal street, Boston, Mass., were awarded contracts on August 10 for paving South Main street with bitulithic on a concrete foundation, Willet avenue with same, at \$42,663 and \$21,524 respectively. F. E. Murray secured the contract for paving Highland street and Locust avenue with brick on a concrete foundation, at \$17,584.

**Poughkeepsie, N. Y.**—The J. H. Flick Construction Company, Mt. Vernon, N. Y., has the contract for reinforced concrete retaining walls and bridge abutments for the N. Y. C. and H. R. R. Co., at Poughkeepsie.

**Rochester, N. Y.**—The Board of Contract and Supply, F. X. Pifer, Clerk, awarded the following contracts for paving work: Brick paving on Delaware street, F. C. Lauer & Son, 458 Clinton street, \$4,255; brick paving on Mt. Vernon avenue, from Caroline to Cayuga street, F. C. Lauer & Son, \$7,300.60.

**Syracuse, N. Y.**—Lyman B. Millikan, of State Life Building, Indianapolis, Ind., has been awarded the contract for construction work on new engine house.

**Utica, N. Y.**—State Engineer Frederick Skene, Capitol Building, Albany, awarded contract to Charles Kilkenny, Utica, for repairing two sections of the Utica-Oneida Castle road.

**Yonkers, N. Y.**—Contracts were awarded by the Board of Contract and Supply at their meeting Aug. 2, as follows: Brick suction well at Tube Well Station Water Works, James H. Russell, Yonkers, \$2,400; for grading Van Sice avenue, M. J. Callahan, Yonkers, \$7,300; sewer, Van Sice avenue, Thos. Grady, \$3,480; grading Morningside avenue, Charlton & Weston, Yonkers, \$7,645; grading Vineyard lane, Augustine Fennell, \$2,686; grading Fifth street, McDonald & Murray, \$8,975; grading Spruce street, Kearns & Hart, \$5,900.

Thomas Grady has been awarded a contract for constructing 352 feet of 20-inch vitrified reinforced pipe sewer 13 feet and 352 feet of 12-inch pipe sewer 11 feet deep. The totals of all bids received were: M. J. Callahan, \$5,448; Charlton & Weston, \$5,290; Lupinacetti & Crangullo, \$5,075; Kelly & Haanefru, \$4,490; J. A. Cranfalon, \$5,200; Thos. Grady, \$3,850; Anthony Fisher, \$7,560; McDonald & Murray, \$4,321; O'Connor, McIntyre Company, \$5,448; N. Manguri, \$4,600; M. J. Nolan, \$5,706; Kearns & Hart, \$5,900.—J. D. McIntyre, Secretary of Board of Contract and Supply.

**Fargo, N. D.**—Bids were received for paving in the First Ward and bids were received for the laying of water mains in six different streets and sewer in five others. Contracts were awarded for the latter work to C. H. Porritt and G. W. Haggart, the successful bidders, as follows:

Water main bids: Water Main District No. 2, Mill's avenue, across Lowell's addition, 490 feet 4 inch, one hydrant, awarded to G. W. Haggart, price per foot, 97 cents, hydrants \$59.

Water Main District No. 2, Thirteenth street north, from Seventh to Eleventh avenue north, 1,380 feet 6 inches, three hydrants, awarded to G. W. Haggart, price per foot \$1.22, hydrants \$59.

Water Main District No. 2, Fifth street north, from Ninth to Tenth avenue north, 300 feet 4 inches, one hydrant, awarded to G. W. Haggart, price per foot 97 cents, hydrants, \$59.

Bids of August 3: Water Main District No. 2, Eleventh street north from Third to Fourth avenue north, 410 feet 6 inches, two hydrants, awarded to C. H. Porritt, price per foot \$1.28, hydrants \$60.

Water Main District No. 2, Twelfth street north, from Third to Fourth avenue north,

320 feet 6 inches pipe, one hydrant, awarded to C. H. Porritt, price per foot \$1.28, hydrants \$60.

Water Main District No. 2, Third avenue north, from Thirteenth to Sixteenth street north, 2,010 feet 6 inches pipe, three hydrants awarded to C. H. Porritt, price per foot \$1.24, hydrant \$60.

Sewer bids, July 27, 1908: Sewer District No. 1, Mills avenue, across Lowell addition, 490 feet 12 inches, three M. H., 7 C. B., awarded to G. W. Haggart, price per foot \$1.32, manholes \$53, catchbasin, \$62.

Sewer District No. 1, Thirteenth street north, from Seventh to Eleventh avenue north, 1,980 feet 12-inch pipe, three manholes, 14 catchbasins, awarded to G. W. Haggart, price per foot \$1.37, manholes \$55, catchbasins \$63.

Sewer District No. 2, Eleventh street north, from First to Second avenue north, 410 feet 12-inch pipe, one catchbasin, awarded to C. H. Porritt, price per foot \$1.30, manholes \$53, catchbasin \$60.

Sewer District No. 3, Fourteenth street south, from Fifth to Sixth avenue south, 350 feet 12-inch pipe, one manhole, two catchbasins, awarded to C. H. Porritt, price per foot \$1.35, manholes, \$54, catchbasin \$60.

Sewer District No. 3, Fourth avenue south, Fourteenth street to Eddy court, 330 feet 12-inch pipe, one manhole, two catchbasins, awarded to C. H. Porritt, price per foot \$1.20, manholes \$54, catchbasins \$60.

**La Moure, N. D.**—Gilbert W. Haggart, Fargo, N. D., has been awarded the contract at \$34,985, for the construction of a sewer system here.

**Canton, O.**—The following bids have been received by W. S. Epperson, architect, for the construction of the proposed new central fire and police station here, all of the bidders being of this city: Keller E. Huff, \$58,571, 180 days; James Devault & Co., \$68,852, 160 days; George H. Wilke & Sons, \$60,869, 240 days; J. Van Kirk, \$71,970, 210 days; Melbourne Bros., \$75,453, 200 days, and W. W. Stephens and Harry Shoof, \$76,117, 270 days. None of the above bids include the plumbing, heating, ventilating, electric wiring or ornamental iron work and bars, as these contracts will be awarded separately.

**Cleveland, O.**—Beers & Doolittle, Cleveland, O., have been awarded the contract for constructing a sewer at \$28,241. The firm claim an error in figures submitted, in which \$7.09 per foot was used instead of \$9.09, making a difference of \$2,620. They were compelled to take the work or forfeit their check for \$4,000.

The lowest bid submitted on Aug. 4 to the Board of Public Service for the construction of the portion of the intercepting sewer in Lakeside avenue, from East Fortieth street to Marquette street, was that of Thomas W. Nicholson at \$124,320. This bid is \$50,000 lower than the estimate of the Engineer.

**Hamilton, O.**—The contract for paving Third street alley was awarded to the W. N. Andrews Asphalt Company for \$2.03 per square yard. The material selected was vitrified brick.

**Lorain, O.**—The contract for the paving of Washington street, from Second to Sixth avenue was awarded to the Baxter Paving Company by the Service Board. The contract price was \$7,962.60; Metropolitan brick will be used.

**Massillon, O.**—The contract for building the new City Hall, 70x100 feet, three stories high, has been let to Emil Converse of this city.

**Ravenna, O.**—The Adams Brothers Construction Company has been awarded the contract for paving East Main, North and South Chestnut and Syracuse streets and Cleveland avenue.

**Steubenville, O.**—Contracts for the construction of sewers were awarded by the Board of Public Service on Aug. 3 as follows: Sewers in portions of Adams and State streets and in Pleasant Heights to J. H. Vanmeter & Co., at \$7,718, \$3,033 and \$6,259, respectively.

Rosser & Mahoney were awarded the contract for paving Sixth and Market streets, they being the lowest bidders.

**Toledo, O.**—Garrigan Brothers, local contractors, were the successful bidders for the construction of the first model road in Lucas County with State aid. The improvement is a mile and a quarter long on the Curtice road, in Jerusalem township; their bid for the job complete was \$9,490. Other bids submitted were: Charles Patton, \$10,262.49; James Sheehan, \$10,290.58. The Engineer's estimate of the cost was \$10,516.55.

**Holdenville, Okla.**—The Hughes County Commissioners have awarded the contract to the Missouri Valley Bridge and Iron Company, Leavenworth, Kan., for the construction of three steel bridges—one near Wetumka, another near Spaulding and third near Citra, Okla.; reinforced concrete piers; length of structures, 511 feet, 205 feet of steel and 306 feet of wood approach, at about \$4,790, excepting fills.

**Eugene, Ore.**—The City Council has awarded contracts for paving eight blocks with bitulithic to the Warren Construction Company; when this contract is completed there

will be 60 blocks of bitulithic paving in the city.

**Guthrie, Okla.**—Manhattan Construction Company, 76 William street, New York City, has the contract for the erection of a convention hall, which will be 200x100 feet, fire-proof construction, and cost \$250,000.

**Dawson, Pa.**—At a meeting of the Dawson Town Council the contracts for street paving were awarded; the Thomas Sweeney Company of Pittsburg will do the grading and the brick work, while C. W. Bettler, of Connellsville, will put in the concrete curbing.

**Exeter, Pa.**—The following bids were opened on July 30 by the Borough Council for constructing sewers in Main street: McConville & Fitzpatrick, Pittston, \$21,911; D. M. Rosser, Kingston, Pa., \$22,648; Pittston Construction Company, \$23,527; James Munley, \$19,720; Standard Construction Company, Wilkes-Barre, Pa., \$20,320; Edward Healey, \$19,807.

**Johnstown, Pa.**—Council awarded the contract for the grading of Cliff street to Contractor Robert A. Reighard, of this city, his bid of \$165 being the lowest. Other bids were as follows: William F. Cook, \$290; John R. Koontz, \$265, and C. A. Shoemaker, \$325. An ordinance giving the Manufacturers' Water Company the right to lay its mains through the borough passed two readings.

**Mont Alto, Pa.**—State Health Commissioner Dixon has awarded to H. L. Spence, of Mont Alto, the contract for hauling 1,050 cubic yards of sand to be used for the sewage disposal plant at the Mont Alto sanatorium at Spence's bid of \$2.35 per cubic yard. George B. Jacobs, of New York, bid \$3.10 per cubic yard and George W. Miller, of Baltimore, bid \$2.80.

**Philadelphia, Pa.**—Bids were received as follows on July 29 by George R. Stearns, Director Public Works, for Contract No. 140, extension of fire main system; Contract No. 145, curbing on Robbins street and Delaware avenue; Contract No. 146, restoring sand to the Belmont, Upper and Lower Roxborough and Torresdale filters; Contract No. 147, sluice-gates for the Torresdale filter plant; Contract No. 148, furnishing 48-inch cast-iron pipe and specials; Contract No. 149, painting buildings at the Upper and Lower Roxborough and Belmont filters; Contract No. 150, surface condenser for the Roxborough auxiliary pumping station; Contract No. 151, furnishing 6, 8 and 10 inch cast-iron pipe and special castings. The bidders were: Michael O'Rourke, 3330 G street, Philadelphia, \$148,310 (awarded contract); Hoffman Engineering and Contracting Company, 1116 Pennsylvania Building, Philadelphia, \$177,635; Owen J. Evers, Heed Building, Philadelphia, \$153,618; M. & J. B. McHugh, 713 and 714 Arcade Building, Philadelphia, \$208,090; David Peoples, 1006 Betz Building, Philadelphia, \$286,333; Filbert Paving and Contracting Company, 904 Pennsylvania Building, Philadelphia, \$171,343; Robert C. Storrie, Nicetown lane and G street, Philadelphia, \$213,730; Millard Construction Company, 704-709 Pennsylvania Building, Philadelphia, \$170,210.

**Pittsburg, Pa.**—Bids were opened as follows by the city on August 3 for constructing ten additional filters in O'Hara township for the water supply: Westwater & Casey, Columbus, O., \$570,406; Booth & Flinn, \$574,577; M. O'Herron, \$598,843. The award of this work will be made to Westwater & Casey, the lowest bidders, the early part of September.—Morris Knowles, Chief Engineer, Bureau of Filtration.

A. Ancoraine was the lowest bidder for the Port Vue and Lovedale road at \$43,447.06. The following contracts have been awarded: Monroeville and Pitcairn connecting road, to the McLaughlin Constructing Company, \$15,582.20; Brighton and Library connecting road, to Collins, Gordon & Co., \$32,192.96; Millers Grove and Clairton road, to W. W. Kelly, \$111,409.05; Broughton and Cochran Mills road, to Collins, Gordon & Co., \$45,902.80, and the Monroeville and Trestle road, to Collins, Gordon & Co., \$48,055.

**Rankin, Pa.**—The contract was awarded on Aug. 5 by the Council to the De Cary Company, at \$10,900, for the construction of a garbage furnace here.

**Reading, Pa.**—The E. A. Wright Bank Note Co., Philadelphia, Pa., has been awarded the contract of furnishing blank bonds for the \$300 bond issue for the sum of \$200.

The Board of Public Works on Aug. 6 awarded the contract to Chiles and Whitman for the construction of a new unit at the disposal plant at \$41,900. The unit will cost \$37,000. The additional boiler and enlargement of the pumping station at Sixth street will cost \$3,700, and the maintenance of the road to the unit, \$1,200.—Elmer H. Beard, City Engineer.

**Sayre, Pa.**—Contract for constructing 2,170 feet of lateral sewers was let to Fred A. Gott, Cherry Creek, N. Y., for \$2,803.50.—H. H. Mercereau, Borough Clerk.

**Windber, Pa.**—The contract for the construction of a new nine-mile pipe line from Clear Shade to Windber has been awarded to Frank Lowry by the Windber Water and

Power Company. The cost of the new line has not been given out, but it is understood it will pass the 125,000 mark. Mr. Lowry will put a large force of men to work tomorrow to excavate for the pipes. The company expects to have the work completed before we write 1909. Clear Shade has a reputation far and wide for clear, cool, pure water. The reservoir will be built about four miles from the junction with Dark Shade and the estimated daily capacity is rated at 10,000,000 gallons. With the completion of the new line Windber will have an abundance of water for years to come.

**Woodbury, Pa.**—Jos. Steelman, of Bridge-ton, has the contract for a new school, to be known as the William Milligan School; cost estimated at \$53,000.

**Woonsocket, R. I.**—The Cumberland Construction Company of Providence, R. I., was awarded the contract on July 31 by the Board of Sewer Commissioners for the construction of sewers in Bernon, Maple and Federal streets and Wood avenue, at about \$4,000.

**Aberdeen, S. D.**—The following bids were received on July 27 for the construction of the East Side sewer system: James Kennedy, Fargo, N. D., \$28,311; Cook Construction Company, Des Moines, Ia., \$32,869; Green & Sons Company, Chicago, Ill., \$33,347; E. T. Webster, St. Cloud, Minn., \$32,826; Pastoret & Lunz, Duluth, Minn., \$32,932; William Frazer, Rochester, Minn., \$34,396; J. J. Dunne-gan, Shenandoah, Ia., \$33,381; O'Neill & Preston, St. Paul, Minn., \$33,585; Jones & Roderick, Canton, Ia., \$32,647; Fambust & Sons, Sioux Falls, S. D., \$33,816; L. W. Kelley, Aberdeen, \$33,199; Tanner Bros., Webster, S. D., \$33,727; Dewey & Sheldon, Aberdeen, \$23,598; N. N. Irwin, Shenandoah, Ia., \$28,534.—D. C. Washburn, City Engineer.

**Memphis, Tenn.**—The following contracts for street paving have been awarded by the city: Florida street, M. Larkin, Memphis, \$27,250; Illinois avenue, Roach & Manigan, Memphis, \$4,082; Central avenue, same, \$4,409.—J. H. Weatherford, City Engineer.

**Ripley, Tenn.**—Pugh Bros. have the contract for a new high school to be erected; cost, about \$14,000.

**Ft. Worth, Tex.**—Contract for 5,400 feet of sewer was let to H. Yorty & Co. of Houston, at \$6.62 per lineal foot.

**Houston, Tex.**—A. M. Lockett & Co., New Orleans, La., were the lowest bidders on July 27, at \$28,583, \$45,965, \$35,214 and \$68,730 for a 15,000,000-gallon pumping engine at the water plant. The Layne & Bowler Company, of Houston, have submitted the lowest bid for drilling two 8-inch artesian wells, one 1,200 feet deep and the other 1,300 feet deep, at \$2.60 per lineal foot, \$2.50 for every gallon produced daily per minute in excess of 347 gallons per minute.

**Houston, Tex.**—H. H. Yorty & Co., of Houston, have submitted the lowest bid for the construction of a brick sewer with vitrified invert, concrete or reinforced concrete, area same as 11-foot circular sewer, 1,300 feet long, at \$32 per lineal foot for brick, \$26.25 for reinforced concrete and \$29 for concrete; Engineer's estimate, \$40,000.

**Marysville, Utah.**—R. D. Young & Co. have been awarded a contract for the construction of the first 20 miles of the canal incidental to the Piute reservation project, at \$30,000. Higher estimates submitted were those of J. W. Hogan at \$40,000 and H. T. Reynolds at \$50,000. Stillman & Co. offered to complete five miles of the work for \$10,000. The reservoir is between Richfield and Marysville and will have cost when completed \$300,000. It will provide irrigation for 20,000 acres of land. The canal will be 40 feet wide at commencement point, gradually narrowing to 15 or 20 feet.

**Portsmouth, Va.**—Contract for installing sewers in Fifth Ward was let to Bryan & Co., of Jacksonville, Fla., for \$68,183.

**Richmond, Va.**—The city has awarded the contract to A. M. Walkup, Richmond, at \$4,500 for repairs to the Free bridge across the James River, consisting of building four trestles under each of the main chords of eight weak spans.

**Beverly, Wash.**—Three thousand acres of land in the Columbia valley at this place, where the Chicago, Milwaukee and St. Paul Railway crosses the river, will be put under irrigation by the Cohasset Irrigation Company, of Spokane, which has been incorporated with a capital of \$1,000,000.

**Seattle, Wash.**—The Board of Public Works awarded the contract for the machinery of the municipal asphalt plant to Hetherington & Berner for \$9,745. There were three other proposals for the work, all of which were within \$100 of the successful bidders. Assistant City Engineer C. J. Moore has charge of the plans for the city asphalt plant and will shortly recommend to the board where it will be placed. There are several available sites now owned by the city. The appropriation for the municipal asphalt plant was \$69,000, of which \$30,000 has been appropriated for machinery to be installed in the rock quarry at Deception Pass. The rock to be obtained from the quarry is a

necessary part of the material to be used in paving the city's streets.

Bids were opened by the Board of Public Works for cluster lights on First avenue and First avenue south, between Weller street and Virginia street. The Olympic Foundry submitted the lowest bid for 140 iron posts at \$38.75 each, a total of \$5,425. Other bids were submitted by F. T. Crowe & Co., \$5,670; Eagle Iron Works, \$6,230; Strehlow, Freese & Peterson, \$6,160. Strehlow, Freese & Peterson submitted the lowest bid for the conduits, at \$30,454.80. The other bidders were Meacham & Babcock, at \$31,132.44; Sparger Concrete Company, \$30,644.41. Agutter & Griswold submitted the lowest bid for the pole furnishings, transformers and cables, at \$12,585.72. Meacham & Babcock bid \$12,693.55, and Strehlow, Freese & Peterson, \$14,983.38. Rardin & Kopta submitted the lowest bid for the grading of an alley in Block 59, A. A. Denny addition, at \$2,973.90. The other bidders were: Sparger Concrete Company, at \$3,286.72; J. Jones & Son, \$3,299.60; Coast Concrete Company, \$3,681.20. S. Normile submitted the lowest bid for the grading of Pasadena place, between East Forty-fifth street and Northlake avenue, at \$4,492. The other bidders were: Andrew Peterson, \$4,972; William Nielan, \$4,870; J. Jones & Son, \$5,728.50.

**Seattle, Wash.**—Bids were received as follows on Aug. 1, by C. B. Bagley, Secretary Board of Public Works, for the construction of the new main for the city in the Cedar River Valley water supply system. No. 2: Grant Smith & Co., Portland, Ore., \$1,172,858 (awarded contract); James Black Masonry & Construction Company, 1101 Alaska Building, Seattle, \$1,178,712. Itemized bids will be given under contract prices next week.

The County Commissioners on July 28 let the contract for macadamizing three miles of road on the extension of Greenwood avenue north from the city limits to Stimson & Kern at \$21,000. There were no other bidders.

The contract for graveling Park avenue, North Renton, from the Issaquah road to the Northern Pacific Railway spur, was let to C. F. Peterson at 64 cents per cubic yard. Other bidders were: C. R. Campbell, 67 cents; N. Davis, 75 cents.

**Sunnyside, Wash.**—The contract for the construction of the Sulphur Creek waste way channel and structures near Sunnyside, for the Reclamation Service has been awarded to the Standard Building Company, of San Francisco, and H. K. Luce of Seattle, Wash., at \$66,096.

**Tacoma, Wash.**—Bids were received by Commissioner McGregor for paving the alley between Tacoma avenue and E street, from South Eleventh and Thirteenth streets. For asphalt D. A. Williams was low bidder at \$10,688 and for brick Worter Bros. were low at \$11,960. The estimate for brick was \$15,045 and for asphalt \$13,619. The Lister Construction Company was low bidder for putting in water mains on North Thirty-first street, between Carr and Pine streets, at \$2,345.

**Martinsburg, W. Va.**—The Martinsburg Power Company of Martinsburg, W. Va., has let the contract for the erection of the power plant at Dam No. 4 to W. M. Kefauver and Arthur L. Shreve, of Baltimore, Md.

**Fond du Lac, Wis.**—Patrick & Frank Caine have the contract, at \$19,502.77 for the Forest avenue pavement.

**Janesville, Wis.**—The People's Construction Company, Davenport, Ia., was awarded the contract on July 31 by the city for work on the main sewer outlet, bulkhead, siphon, etc., to be of plain concrete construction, at \$45,948.

**Madison, Wis.**—The lowest bid received on July 30 by the State Capitol Commission for electric fixtures for the new west wing of the Capitol was submitted by the Mitchell-Vance Electric Company, of New York, N. Y., for \$30,000. The Alphons Custodis Chimney Construction Company, of Chicago, Ill., has secured the contract for building the 254-foot chimney on the separate heating and power plant for the State Capitol, at \$17,000.

**Racine, Wis.**—Wording-Allen Company were the lowest bidders, at \$5,480, for replanking and altering floor system of the Sixth street viaduct.

**Edmonton, Alta., Can.**—A contract has been let to John Gunn & Son, Winnipeg, Man., for the construction of the steel and concrete bridge across the Pembina River west of here. The bridge will be 1,000 feet long and 230 feet high.

**Victoria, B. C.**—Tenders for new pumping machinery to be installed at the North Dairy Farm in connection with the new water works distribution and for the high level tank to be erected on the site recently purchased from Albert Toller on St. Charles street, which will serve as a reservoir to supply the district in the neighborhood of Rockland avenue, were opened. The following were the tenders received: For the engine and pumps at the North Dairy Farm pumping station: Hallidie Machinery Company, \$21,761; George A. Walkem & Co., Vancouver, \$22,000; John Inglis

& Co., Ltd., \$17,850; R. P. Rithet & Co., three tenders of the following makes of engines, Laidlaw, Dunn, Gordon Corliss, \$20,672, Laidlaw, Dunn, Gordon, Meyer, \$17,308, Snow Corliss, \$29,675, Vancouver Engineering Works, \$14,500; Lenfield & Kennedy, f. o. b. Glasgow, \$2,305, shipment within nine months; Allis-Chalmers Bullock Company, \$29,500; R. J. Knott, Victoria, alternative tenders, \$18,663, \$12,352, \$15,281; John McDougall, Caledonia Iron Works, \$20,000, and two alternative bids of \$16,000 and \$28,000. The tenders for the high level tank of both styles were as follows: McDougall & Jenkins, Victoria, \$17,520; John Inglis & Co., \$9,775; Hutchinson Bros. & Co., Victoria, \$8,800; Westholme Lumber Company, \$11,400; steel and concrete, \$16,500; Vancouver Engineering Works, \$16,000, steel and concrete, \$25,000; Ontario Wind Engine and Pump Company, \$6,777; C. Lennon, concrete and steel, \$10,515; Marine Iron Works, Portland, \$7,500; Hallidie Machinery Company, \$8,226; Willamette Iron and Steel Company, Portland, \$8,495.

**Fredericton, N. B.**—Contract for steel superstructure of three spans of highway bridge let to McNeil & Co., of New Glasgow.

## PATENT CLAIMS

894,859. Machine for Tarring and Sanding the Surface of Streets. William C. Southgate, Dunedin, New Zealand. Serial No. 396,836.

A machine for tarring and sanding the surface of the streets and the like, comprising in combination a truck mounted on road wheels, a tar tank and a sand hopper on the truck, means for leading tar from the tar tank and spreading it on the surface to be treated, means for discharging the sand from the sand hopper, and a spreading roller in the path of said sand as described.

894,893. Road-Grader. Ernest Lee, Springfield, Ill. Serial No. 424,819.

A road grader comprising a frame having at its forward edge a cutting plate and at its rear portion a soil packing beam, runners pivotally mounted at the forward portion of the frame and means for swinging the runners to raise or lower the forward portion of the frame.

894,898. Hydrant. George A. Owen, Springfield, Mass. Serial No. 303,058.

In a hydrant, a hydrant casing having an enlarged upwardly open chamber portion at its top, a hydrant body vertically movable in said casing having near its upper portion a hose reel rotatable thereabout, and having above and below the reel the covers E and F adapted for closing the mouth of the enlarged chambered portion of the casing, in both the lowered and elevated positions of the hydrant body, means for elevating the hydrant body, and the reel therewith,—relatively to the casing, and means for opening and closing the water way through the hydrant.

894,912. Crematory. Fred P. Smith, Kansas City, Kan., assignor of one-half to Edward C. Lewis, Chicago, Ill., and John H. Kitchen, Kansas City, Mo., Copartners, doing business as Lewis & Kitchen, Kansas City, Mo., a Firm. Serial No. 234,081.

In a crematory, the combination of a chimney or stack; two combustion chambers located adjacent to each other and communicating with the stack at their proximate ends through separate and independently-controllable openings; and a flue or chamber extending beneath the combustion chambers and connecting the remote ends thereof.

895,026. Blowpipe for Cutting Metal Plates, Pipes, and the Like. Felix Jottrand and Primo Lull, Uccle, near Brussels, Belgium, assignors to Société Anonyme l'Oxydrique Internationale, Brussels, Belgium. Serial No. 352,367.

In a cutting off blowpipe in combination a holder (1), means for supporting feed pipes (4, 5) on said holder, a sleeve at the end of said holder, a pipe (8) fixed in said sleeve and means for supporting a second pipe (25) by said pipe (8) and varying the position of the second pipe (25) relatively to the first pipe (8) substantially as described and for the purpose set forth.

895,129. Garbage-Incinerator. William H. Van Doren, Los Angeles Cal. Serial No. 335,014.

An incinerator comprising a stack, an upwardly inclined conduit to open into the stack, an upwardly inclined conveyor in the conduit to discharge into the stack, a fluid fuel burner at the base of the conveyor, and a furnace at the base of the stack to complete the combustion of unburned combustibles thus discharged.

895,198. Apparatus for Purifying Water. Hans Reisert, Cologne, Germany, assignor to Hans Reisert Company, a Corporation of Germany. Serial No. 316,428.

In a water purifying apparatus, the combination of a filter, a discharge passage for the filtered water, a reservoir arranged be-



tween said filter and said passage and adapted to be supplied with purified water during the filtering operation by the flow of water in one direction through the filter, means connecting said reservoir and filter, said means being of ample cross-section to permit the rapid supply of water from the reservoir to the filter in the reverse direction during the wash out operation, and means for rapidly forcing the water contained in said reservoir through said filter bed.

895,243. **Interlocking Concrete Curb-Block.** Sydney L. Davis, Pensacola, Fla. Serial No. 424,209.

A curb block provided with a cut-away portion at the inner upper edge thereof and extending the length of said curb, said cut-away portion forming an inward projection, a groove extending the length of the upper face of said inward projection and forming an upwardly extending rib.

895,271. **Road-Grading Machine.** Parley J. Jewett, Butler, Mo. Serial No. 429,658.

A grading device comprising a land side bar, a platform secured to said land side, a mold board connected to the front end of said land side, a draft device connected to said grader, a lever for adjusting the mold board vertically, and a rudder for preventing the machine from switching or sluing upon the road.

895,296. **Sand-Filter.** Johan M. K. Pennik, Amsterdam, Netherlands. Serial No. 395,755.

In a sand filter, a filter basin, a filter bed therein, a filter cloth lying closely on the top layer of sand forming said filter bed and formed with an opening, a conduit with which the opening of said cloth communicates and means for controlling at will the passage through said conduit.

## INCORPORATIONS

**Dominican Construction Company,** New York, N. Y.; general contractors; capital, \$600,000. Incorporators: Edmonds Putney, Walter H. Griffin, Harry J. Osborne, 2 Rector street, New York.

**H. Ferullo Company,** Boston, Mass.; contractors; capital, \$50,000. President, Ernst M. Parsons, Boston; treasurer, George F. Neal, Boston; clerk, S. R. Miller, Brookline.

**Great Lakes Portland Cement Company,** Detroit, Mich.; capital, \$1,500,000. Incorporators: George M. Read and Harold W. Hanlon, No. 511 Moffat Building, Detroit; Harry W. Davis, Wilmington.

**Jamesburg Water Company,** Tuckerton, N. J.; to operate water works in Jamesburg; capital, \$50,000. Incorporators: Merritt W. Phare, Louis Rafette, Albert W. Pharo, David R. Warman, Frederick W. Foedisch, T. Frank Pharo, Joseph W. Pharo.

**Pennsylvania Construction Company,** Camden, N. J.; to operate quarries, contractors, etc.; capital, \$100,000. Incorporators: William H. Kneeder, Bridgeport, Pa.; John H. Franck, No. 5135 Reno street, West Philadelphia; William D. Lippincott, as above.

**Royalton, Power and Light Company,** Royalton, Minn.; to erect a modern lighting plant on the Platte river; capital, \$10,000. Incorporators: Chas. R. Rhodes and others.

**Sumer Manufacturing Company,** Orange, N. J.; manufacture the Miller water heater and the Miller gas and smoke consumer; capital, \$100,000. Incorporators: John Miller, Michael Winter, William F. Wurster, Robert Wright, James R. Stewart, Orange.

## Civil Service Examinations

**Testing Engineer.**—The United States Civil Service Commission announces an examination, September 16, to fill a vacancy in the position of timber testing engineer in the Philippine Forestry Service, at \$1,800 per annum. Application Forms 2 and 375.

**Civil Engineer and Superintendent of Construction.**—The United States Civil Service Commission announces an examination, September 9-10, to fill a vacancy in the position of civil engineer and superintendent of construction, at \$1,500 per annum, in the Quartermaster's Department at Large, New London, Conn., and other vacancies as they occur. Application Form 1312.

**Engineer in Wood Preservation.**—The United States Civil Service Commission announces an examination, September 2, to fill about eight vacancies in the Forest Service Department of Agriculture, at an entrance salary of \$1,000 per annum. Application Form 1,312.

**Inspector of Mechanical and Electrical Engineering.**—The United States Civil Service Commission announces an examination, September 2-3, to fill a vacancy in the position of mechanical and electrical engineering, at \$2,190 per annum in the office of the Supervising Architect, Treasury Department. Application Form 1,312.

## Proposals

### GARBAGE COLLECTION AND DISPOSAL

Reading, Pa., Aug. 13, 1908.

Sealed proposals will be received at the office of City Clerk until 7 p.m. Friday, Aug. 28, for the collection, removal and disposal of all garbage and offal in the city of Reading, for the period of three and five years.

Each bid or proposal must be accompanied by a bond executed by a trust company existing under the laws of the State of Pennsylvania or authorized to do business in the State of Pennsylvania, or a certified check in the sum of Two Thousand Dollars (\$2,000), and the successful bidder will be required to enter into a contract bond in the sum of Ten Thousand dollars (\$10,000), said bond to be executed by a trust company existing under the laws of Pennsylvania or authorized to do business in the State of Pennsylvania.

Specifications of the work can be seen and proposal bonds had at the office of the City Engineer. All proposals must be endorsed "Proposal for the collection, removal and disposal of all garbage and offal in the city of Reading," and addressed to the Department of Garbage, care of Caleb Weidner, City Clerk.

The right is reserved to reject any or all bids.

(8) ELMER H. BEARD,  
City Engineer.

### GARBAGE COLLECTION AND REMOVAL

Youngstown, Ohio.

The Board of Health of the City of Youngstown, Ohio, will receive, until 12 o'clock noon, August 29, 1908, sealed bids for the collection and removal of garbage in said city for a period of five years. For full details, address Dr. H. E. Welch, Health Officer. The right to reject any or all bids reserved. (5-6-7-8-9)

### SEWER CONSTRUCTION

#### Notice to Contractors

Sealed proposals will be received by the Board of Public Works of the City of Burlington, Racine County, Wisconsin, at its office in the City Hall, in said city, until Wednesday, the 26th day of August, A. D. 1908, at 2 o'clock p. m., for furnishing all the labor and materials necessary to make and fully complete the following sewers, together with all necessary manholes, lamp-holes, sewer connections, "Ys," etc., according to the profiles, plans and specifications now on file for the inspection of bidders in the office of said Board; said work to be begun within ten (10) days and completed within 120 days after the final execution of the contract by all parties interested:

24 lineal feet of 20-inch cast-iron pipe  
230 lineal feet of 20-inch vitrified sewer pipe  
1,324 lineal feet of 15-inch vitrified sewer pipe  
1,652 lineal feet of 12-inch vitrified sewer pipe  
2,178 lineal feet of 10-inch vitrified sewer pipe  
6,850 lineal feet of 8-inch vitrified sewer pipe  
5,683 lineal feet of 6-inch vitrified sewer pipe  
51 manholes, 12 lamp-holes.

A blank form of contract, with bond, to be executed by the bidder and returned with his proposal and bond, will be furnished upon application. No bids will be considered unless made upon said blanks and as required by law.

The power to reject any and all bids is reserved.

Dated at Burlington, Wis., August 7, 1908.

(8) P. J. HURTGEN,  
H. E. ZIMMERMAN,  
E. JOHN WEHMHOF,  
Board of Public Works.

### SEPTIC TANK

Seneca Falls, N. Y.

Sealed proposals will be received by John M. Guion, Clerk of the Municipal Board of the village of Seneca Falls, N. Y., at the Trustees' Rooms, until 4 p.m. August 27, 1908, for the construction of a septic tank and appurtenances.

Principal items are approximately as follows:

650 cubic yards concrete.  
14,000 lbs. steel reinforcement.  
1,400 cubic yards earth excavation and borrow.

A properly certified check for \$500 must accompany each bid.

A bond in the sum of \$4,000 will be required for the faithful performance of the contract.

The right is reserved to reject any or all bids.

Plans and specifications may be obtained of the Engineers or the Clerk, by making a deposit of \$2, which will be returned upon the return of the plans in good condition.

JOHN M. GUION,  
Clerk.

Seneca Falls, N. Y.  
MORRISON & FARRINGTON, INC.,  
Engrs.,  
Syracuse, N. Y.

### BRIDGE CONSTRUCTION

#### Notice to Contractors

Springfield, Ohio.

Sealed bids will be received by the Board of Public Service of the City of Springfield, State of Ohio, at the office of the Clerk of said Board, Room 5, City Building, until 12 o'clock, noon, of Tuesday, August 25, 1908, for the furnishing of the necessary labor and material for the constructing of a bridge across Buck Creek and the Ansted-Burk Company head race at Sherman avenue and Nelson street, in accordance with the plans and specifications therefor, now on file in the office of the Department of Public Service.

Each bid must contain the full name of every person or company interested therein, and be accompanied by bond with two sureties, to the approval of the Board, in the sum of \$2,500, or a certified check in like amount, upon some solvent bank, as a guarantee that if the bid is accepted a contract will be entered into and its performance properly secured.

The envelope or wrapper containing said bid must be plainly marked "Bid for constructing bridge over Buck Creek and the Ansted-Burk head race."

The right is reserved to reject any and all bids.

By order of the Board of Public Service,  
WM. H. MAHONEY,  
(Aug 12-19) Clerk.

### CAST-IRON WATER MAIN

Galveston, Tex., Aug. 5, 1908.

Sealed proposals will be received by the Board of City Commissioners of the city of Galveston, at the office of the City Secretary, until 12 o'clock, M., Thursday, August 27, 1908, and opened at the first regular or special City Commissioners' meeting thereafter, for furnishing all material and doing all work necessary for the complete installation or construction of a cast-iron water main across the Galveston ship channel from pier No. 14 to the United States Government dyke; said main requiring approximately 1,500 lineal feet of cast-iron pipe, and to be submerged to the depth of 42 feet below mean low tide. All work to be done in accordance with and agreeably to plans, details and specifications therefor prepared by the City Engineer, which will be furnished upon application. Each proposal must be submitted in duplicate and accompanied by a certified check payable to the order of the President and Board of City Commissioners in the sum of 5 per cent. of amount of said bid, or the same will not be considered. Bond in the sum of 50 per cent. of amount of the contract price will be required for the faithful performance of the contract; sureties thereon must be satisfactory to the Board of City Commissioners.

Proposals must be submitted for the construction of said water main with 6-inch cast-iron pipe, and also with 8-inch cast-iron pipe, as provided in specifications, and the certified check to accompany said proposals to be based on the amount bid for the complete construction of an 8-inch water main. The Board of City Commissioners reserves the right to reject any and all bids, or to accept the proposal for either the 6-inch or 8-inch cast-iron main, as may in their judgment be for the best interest of the city.

Bidders will not be permitted to modify or withdraw their proposals after the same have been submitted for consideration of the Board of Commissioners, and the right is reserved to waive technical defects if in the interest of the city.

H. C. LANGE,  
Commissioner of Water Works  
and Sewerage.  
A. T. DICKEY,  
City Engineer.  
JOHN D. KELLEY,  
City Secretary.